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Finanční analýza společnosti Prada

Financial Analysis of Prada Company

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3. Financial Characteristics of Prada Company
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5. Conclusion

Bibliography
List of Abbreviations
Declaration of Utilisation of Results from the Bachelor Thesis
List of Annexes
Annexes

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Content

1 Introduction

Financial analysis refers to the procedure of examining historical data to obtain some information about the company's current and future financial conditions. So, conducting financial analysis for a company is very important for both of the company's managers and investors. For managers, the decisions which they make will influence the company's operation and future development. Thus, it's clear that financial analysis will help managers to estimate the company's current financial situation and make right decisions. For investors, they need to learn the company's current specific financial condition and predict the future condition that the company will be. Only after knowing these basic information of the company's financial situation, can they make final decision of whether to invest in this company or not.

The goal of this thesis is to analyze the financial situation of PRADA from 2012 to 2016 by conducting common-size analysis, financial ratio analysis and DuPont analysis.

This thesis is written to introduce what the financial analysis is and conduct financial analysis of PRADA based on PRADA's annual report from 2012 to 2016. There are five chapters in this thesis. The first chapter is introduction. The second chapter is description of the financial analysis methodology. The third chapter is financial characteristics of PRADA. The fourth chapter is financial analysis of PRADA. And the last chapter is conclusion.

In chapter 2, at first, we will introduce three kinds of financial statements which include balance sheet, income statement and cash flow statement. Financial statements are very important because they provide basic data for other financial analysis methodology. Then, we will describe common-size analysis which contains vertical common-size analysis and horizontal common-size analysis. And in the last part we will describe financial ratio analysis which contains five kinds, they are: profitability ratios, liquidity ratios, solvency ratios, activity ratios and DuPont analysis.

In chapter 3, at first, we will introduce some basic information of PRADA from three aspects: history, business model and competition. The PRADA group is one of the world's leader in luxury goods industry with a long history. And it listed on the Hong Kong Stock Exchange in 2011. It focuses on unique design of luxury products such as handbags, leather goods, eyewear and footwear. And it is also a typical company among the whole luxury industries. Thus, we select PRADA as the analysis object of our thesis. Then, we will use some data from annual report of PRADA from 2012 to 2016, and make balance sheet, income

statement by using these data. Based on these data, combining with the method we have mentioned in chapter 2, we will conduct common-size analysis of PRADA.

In chapter 4, we will conduct financial ratio analysis of PRADA. This chapter is the most important one among the whole thesis. Because in this chapter, we will know the PRADA's specific financial situation from different aspects by calculating profitability ratios, liquidity ratios, solvency ratios, activity ratios and make conclusion from these calculation results. And we will also use DuPont analysis to conduct further analysis of PRADA's return on equity by decomposing this ratio.

2 Description of the financial analysis methodology

In this chapter, we will describe the financial analysis methodology which includes three parts. The first part is the financial statements which contain balance sheet, income statement and cash flow statement. The second part is the common-size analysis. The last part is the financial ratio analysis. And the relationship between these three parts is that the financial statements provide basic data for common-size analysis and financial ratio analysis.

Financial analysis refers to the procedure of examining historical data to obtain some information about the company's current and future financial conditions. The assessment mainly focus on four perspectives: the profitability, solvency, liquidity and stability of the company. It’s necessary for the company’s manager to understand the results of the financial analysis and make final critical decisions. Considering that financial analysis plays such important role in the development of the company, the following article will describe these financial analysis methodologies in depth.

2.1 Financial statements

A financial statement is a formal record which comprehensively reflect the financial status of a specific date of a company, the operating results, and cash flow conditions of a specific period. A complete set of financial statements includes balance sheet, income statement, cash flow statement, statement of changes in equity and notes to the financial statements. Scientific and reasonable financial statement analysis can help the company managers, creditors, shareholders to understand the overall financial situation of listed companies, and forecast the company’s prospects. Finally, they can make decisions.

2.1.1 Balanced sheet

A balance sheet reflects the financial position of an enterprise at a specific time (such as the end of the year and the end of the interim period) and is an important static statement. We can estimate whether the company’s financial situation is good, and make judgments about whether the capital structure is reasonable, whether the solvency and liquidity are fine by analyzing the balance sheet. There are two main parts in the balance sheet: assets, liabilities and equity. The part assets always shown as the left side of the balance sheet. And the other part liabilities and equity are shown as the right side of the balance sheet.

And the basic equation that these parts will follow is:

$$Assets = Liabilities + Equity \ . \tag{2.1}$$

Tab.2.1 Structure of balance sheet

Balance Sheet	
Assets	**Equity + Liabilities**
Long-term Assets	**Equity**
Tangible assets	Preferred stock
Intangible assets	Common stock
Financial investments	Retained earnings
Current Assets	**Long-term liabilities**
Cash and cash equivalents	Long-term bank loans
Accounts receivables	Bonds issued
Inventories	**Current Liabilities**
	Accounts payable
	Commercial paper
Total assets	**Total equity and liabilities**

An asset is a resource that is formed by a company's past transactions or events, owned or controlled by the company and is expected to bring economic benefits to the company. As is shown in the table, assets can be classified into two parts: current assets and long-term assets, which can also be called fixed assets. Current assets include cash, cash equivalents, bank deposits, accounts receivable, inventories and so on. The characteristics of current assets are that they can be turned into cash within one year. It also means that the liquidity of current assets is higher than long-term assets. Thus, holding certain amount of current assets are very necessary for company to maintain the liquidity of company asset structure and guarantee the normal and smooth operation of the business activities.

As for long-term assets, normally they can be classified into tangible, intangible assets and financial investments. Tangible assets refer to land, building, machinery and equipment, etc. Intangible assets refer to patents, trademarks and goodwill, etc. Financial investments refer to stocks, bonds, real estate, etc. The main characteristics of long-term assets are that they are of very great value, and they can be maintained for a long time, usually more than one year.

Because of their great value, long-term assets determine the potential development of business performance to a great extent.

A liability is a resource that the company borrows today and must repay after a certain period of time. It can also be divided into two parts: current liabilities and long-term liabilities. The current liabilities are a company's debts or obligations that are due within one year, which include short term debt, accounts payable, commercial paper, etc. The long-term liabilities are liabilities that company expects to pay back more than one year. Typical long-term liabilities include bank loans, notes payable, bonds payable and mortgages.

Owners' equity is the ownership of the net assets of the enterprise investor. Owners' equity includes the owner's share of the profits of the enterprise as a percentage of its contribution. At the same time, the owner must also bear the business risk of the enterprise. Owners' equity also means that the owner has the legal authority to manage the enterprise. Owner's equity includes preferred stocks, common stocks and retained earnings.

2.1.2 Income statement

The income statement reflects the operating performance of a company over a certain accounting period. It's also a financial record which reports the sales revenue, cost of sales, fees and tax status, the results of the statements will be the criteria for judging whether the company is profitable or not. One important thing that we need to know about an income statement is that it represents a particular period like the cash flow statement. This contrasts with the balance sheet, which represents a given point in time.

The basic equation on which an income statement is based is:

$$Net\ income = Revenues - Expenses\ . \tag{2.2}$$

Tab 2.2 Structure of income statement

Income statement
Revenue
Cost of sales
Gross profit
Operating expenses
Operating income
Operating profit
Financial expenses
Financial income
Net financial items
Profit before tax
Taxation
Net profit

As is shown in the table, revenues and costs are two basic components of income statement. And in order to calculate revenues and costs of a company, we need to know what kind of activities they belong to. There are two main activities: operating activity and financing activity.

The revenues of the operating activity come from the sale of products and the services. And the costs of the operating activity come from the raw material and electricity consumption, depreciation, costs of goods sold, salaries and wages paid to employees, etc.

The revenue of the financing activity come from the interests received and revenues from owned securities, etc. And the costs of the financing activity come from interest and coupon paid, etc.

The roles of the income statement are:

- It can be used as the basis for the distribution of operating results;
- It can help assess the performance of operation and management personnel by reflecting all aspects of production and business activities;
- It can be used to analyze the profitability of enterprises, and forecast the company's future financial situation.

2.1.3 Cash flow statement

The cash flow statement reflects the impact of an enterprise's business activities, investment activities and financing activities on its cash and cash equivalents over a certain period of time (monthly, quarterly or annual). In brief, it refers to the changes in cash movements.

Tab 2.3 structure of cash flow statement

Operating activity
Net income/loss
Depreciations
Change in accounts receivable and payable
Change in inventories
Change in accrued wages and salaries payable
Change in income tax payable
Net cash flow from operation activities
Change in tangible assets
Change in intangible assets
Change in financial investments
Net cash flow from investing activities
Payment of debt payable
Payment of dividends
Net cash flow from financing activities
Total increase /decrease in cash flow

As is shown in the table, the total cash flow equals the sum of the cash flow from operating activities, investing activities and financing activities.

Cash flow from operating activities reflects the inflows and outflows from daily company's activities. The cash inflows can come from the sales of goods and services, etc. And the cash outflows can come from the employees' salaries and wages, taxes, etc.

Cash flow from investing activities reflects the inflows and outflows that come from selling and purchasing of long-term assets such as tangible and intangible assets.

Cash flow from financing activities reflects the inflows and outflows that come from gaining and paying back capital. The cash inflows can come from issuing bonds and shares, etc. And the cash outflows can come from paying the dividends and interests of bonds, etc.

The roles of the cash flow statement are:

- It reflects whether the company is healthy or not;
- It reflects the short-term viability of the company, especially the ability to pay back debts;
- It can help estimate the ability to generate cash and forecast the future cash flows of the company.

2.2 Common-size analysis

The common-size analysis switches each row of financial statement data into an easy-to-compare, or common-size amount which is expressed as a percentage. It mainly concerned the analysis of financial statements data and their changes over time. And the common-size analysis is a method that is used to help investors to assess the general trends of the company's financial situation. It includes two parts: vertical common-size analysis and horizontal common-size analysis.

2.2.1 Vertical common-size analysis

Vertical common-size analysis is the proportional analysis of a financial statement selected benchmarks such as total revenues, total assets, total liabilities, etc. In a financial statement, the data of each item in the table is compared with the total number of statements to evaluate the importance and change of each item. By using the vertical analysis, investors can understand whether there is room for the company's improvement and the speed of the improvement.

To conduct a vertical analysis of balance sheet, we can choose the total assets and the total liabilities and equity as basic benchmarks. The individual items of assets are shown as a percentage of total assets. And the current liabilities, long term debts and equities are shown as a percentage of the total liabilities and equity.

To conduct a vertical analysis of income statement, we can choose sales as the basic benchmark. And other components of income statement such as cost of sales, operating expenses, and net income, etc. are shown as a percentage of sales. In a vertical analysis, the

percentage is computed by using the following formula:

$$\%E = \frac{\mathrm{X}i}{\sum_n \mathrm{X}i} \cdot 100 \ . \tag{2.3}$$

where %E means the proportion of the project, $\mathrm{X}i$ means the item, $\sum_n \mathrm{X}i$ means the sum of the item.

2.2.2 Horizontal common-size analysis

Horizontal analysis refers to a method which compares the information that reflects the financial position of the enterprise in the reporting period with the information that reflects the financial status of the enterprise in the early or historical period. It can help investors to understand relative changes over time and identify positive or potentially disturbing trends.

The horizontal analysis needs to analyze the statements for two or more periods. The earliest period is usually regarded as the basic period and the items on the statements for all later periods are compared with items on the statements of the basic period.

$$Absolute\ change = U_t - U_{t-1} \ . \tag{2.4}$$

$$Percentage\ change = \frac{U_t - U_{t-1}}{U_{t-1}} \cdot 100\% \ . \tag{2.5}$$

where U_t means amount of benchmark, U_{t-1} means the early or history of the benchmark period.

2.3 Financial ratio analysis

The financial ratio analysis evaluates the company's financial health condition by comparing some financial data calculated as financial ratios. Because sometimes it's hard to analyze some individual items, however, it's possible when comparing two items of the financial statement.

Financial ratio analysis can reduce the impact of company's size, and can be used to compare the benefits and risks of different companies to help investors and creditors to make sensible decisions.

Financial ratios can be classified into five kinds to measure the profitability, liquidity, solvency, activity and DuPont analysis of the company. Different ratios are used for analyzing different financial situation.

2.3.1 Profitability ratios

The profitability ratios are used to analyze the company's ability to generate earnings, add value to the capital during a specific period of time. They usually reflect the level of the amount of corporate income. For most of these ratios, the higher the profitability ratios are, the more profits company will generate.

There are five basic ratios of the profitability ratios. They are gross profit margin, operating profit margin, net profit margin, return on assets and return on equity.

Gross profit margin (GPM) measures the proportion of remaining money from revenues after subtracting cost of goods sold (COGS). And this ratio is used to evaluate whether a company's financial situation is health and the profitability of the company by comparing with competitors or even the overall industry. In general, the higher is the ratio, the better for the company. Because it means that the company has enough money to cover its operating costs. The gross profit margin ratio would be computed as:

$$GPM = \frac{Rev - COGS}{Rev} \quad . \tag{2.5}$$

where *Rev* is the abbreviation of revenue, *COGS* is cost of goods sold.

Operating profit margin (OPM) reveals the proportion of a company's operating profit which means the remaining amount of money after subtracting costs and expenses of operating activity accounts for revenues. Specially, operating profit is also called the profit before interest and tax. And this ratio also help the company's manger and other investors to estimate whether the company's pricing strategy is suitable or not and whether operating is efficient or not. In general, the higher is the ratio, the better for the company. Because it means that the company's core business is efficient. The operating profit margin ratio would be computed as:

$$OPM = \frac{EBIT}{Rev} \ . \tag{2.6}$$

where *EBIT* is earning before interest and taxes, *Rev* is the abbreviation of revenue.

Net profit margin (NPM) shows the proportion of net profit accounts for revenues. In another word, it also indicates the amount of each fund received by the company as revenues into profits. And that is also the reason why shareholders pay more attention to this ratio. Different industries have different range of net profit margin. So, net profit margin should be used to compare with the similar industry. But we need to notice that low profit margin doesn't necessarily mean profits will be low, either. The net profit margin ratio would be computed as:

$$NPM = \frac{EAT}{Rev} \quad . \tag{2.7}$$

where *EAT* is earning after taxes, *Rev* is abbreviation of revenue.

Return on assets (ROA) shows the proportion of operating profit accounts for total assets. In another word, it also measures how many profits a company can generate from total assets. The level of the ratio indicates how efficient when the company uses its assets to generate profits. In general, the higher is the ratio, the better for the company. Because it means the company can earn more money but only on less investment. The return on assets would be computed as:

$$ROA = \frac{EBIT}{A} \quad . \tag{2.8}$$

where *EBIT* is earning before interest and taxes, *A* is abbreviation of assets.

Return on equity(ROE) shows the proportion of net profit accounts for shareholders' equity. In another word, it also measures how profitability a company will be by analyzing the amount of profit a company can generate from shareholders' equity. In general, the higher is the ratio, the better the company will be. Because the higher ROE means the company can increase its ability to generate profits without increasing as much capital. The return on equity would be computed as:

$$ROE = \frac{EAT}{Equity} \quad . \tag{2.9}$$

where *EAT* is earning after taxes.

2.3.2 Liquidity ratios

The Liquidity ratios are used to evaluate a company's ability to cover short-term liabilities and obligations with liquid assets. The liquid assets refer to some kinds of current assets, which already in the form of cash or can be transformed into cash quickly. In general, a higher liquidity ratio indicates that a company is more liquid and has better ability to deal with current liabilities. And it also means that the company's financial safety is more secured.

The liquidity ratios include three basic ratios: current ratio, quick ratio and cash ratio.

Current ratio shows the proportion of current assets accounts for current liabilities. In another word, it also measures a company's ability to pay short-term liabilities with its assets. In general, the higher is the current ratio, the better for the company. Because it means the

company is more capable of paying its short-term obligations. The current ratio would be computed as:

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities} \quad . \tag{2.10}$$

Quick ratio shows the proportion of the difference between current assets and inventories accounts for current liabilities. It is stricter than the current ratio because it subtracts inventories from current assets. In another word, it measures a company's ability to meet its short-term obligations with its most liquid assets. In general, the higher is the ratio, the better for the company. Because the higher ratio means in short term, it's more secure for the company. The quick ratio would be computed as:

$$Quick\ Ratio = \frac{Current\ Assets - Inventories}{Current\ Liabilites} \quad . \tag{2.11}$$

Cash ratio shows the proportion of cash and market securities accounts for current liabilities. It is stricter than the above two ratios. Because it restricts the assets to the most liquid assets. In another word, it calculates a company's ability to pay its short-term liabilities with the most liquid assets. And the cash ratio is the ratio which is most commonly used to evaluate a company's liquidity. The cash ratio would be computed as:

$$Cash\ Ratio = \frac{Cash + Market\ Securities}{Current\ Liabilities} \quad . \tag{2.12}$$

2.3.3 Solvency ratios

The solvency ratio evaluates whether a company has ability, has enough cash flow to pay for its long-term liabilities. And the lower solvency ratio indicates there is greater probability of the company will default on its legal debt obligations. So, we can see that solvency ratio is a signal to predict whether the company will go bankrupt or not. It is very important for both company's managers and creditors.

Then, we will talk about the difference between solvency and liquidity ratio, because they look so similar. What liquidity ratios measure is the ability to meet short-term obligations. It concerns current financial accounts. However, solvency ratios pay more attention to long-term liabilities and the ability of maintaining long-term operations.

The solvency ratios include three basic types: debt ratio, debt-to-equity ratio and interest coverage.

Debt ratio shows the proportion of total debt accounts for total assets. In another word, it also measures the degree of leverage of a company. In general, the higher is this ratio, the worse for the company. Because it means that the company is more leveraged and thus has greater financial risk. The debt ratio would be computed as:

$$Debt\ Ratio = \frac{Total\ Debt}{Total\ Assets} \quad . \tag{2.13}$$

Debt-to-equity ratio shows the proportion of total debt accounts for shareholders' equity. It is similar to debt ratio. And it's also used to measure a company's financial leverage. But the difference between this ratio and debt ratio is that this ratio measures the extent that shareholders' equity can cover its obligations. The debt-to-equity ratio would be computed as:

$$Debt\ To\ Equity\ Ratio = \frac{Total\ Debt}{Equity} \quad . \tag{2.14}$$

Interest coverage shows the proportion of earning before interest and tax accounts for interest paid. In another word, it measures the ability of a company to meet its interest payment obligations. In general, the lower is the ratio, the worse for the company. Because it means that the company has more debt expenses burden. The interest coverage would be computed as:

$$Interest\ Coverage = \frac{Earning\ Before\ Iterest\ And\ Tax}{Interest\ Paid} \quad . \tag{2.15}$$

2.3.4 Activity ratios

Activity ratios measure how efficient a company will be to generate revenues from its assets, liabilities and shares. And activity ratios also reflect how well a company manage its operations. So, when investors compare the company with other competitors or the whole industry to know if the company's processes are favorable or unfavorable. They need to analyze the activity ratios.

Activity ratios include four basic types: average collection period, accounts receivable turnover, inventory turnover and total assets turnover.

Average collection period measures the number of days a company need to collect receivables back. In general, a lower average collection period is more beneficial for a company than a higher average collection period. Because a low average collection period means that the company can collect payment back faster. The average collection period would be computed as:

$$Average\ Collection\ Period = \frac{Accounts\ Receivable}{Revenues} \cdot 360 \ . \tag{2.16}$$

Accounts receivable turnover measures the number of times accounts receivables will be collected. The lower is the average collection period, the higher the accounts receivable turnover will be. The accounts receivable turnover would be computed as

$$Accounts\ Receivable\ Turnover = \frac{Revenues}{Accounts\ Receivables} \quad . \tag{2.17}$$

Inventory turnover shows the number of times a company's inventory is sold. So, it also means that it measures the speed a company can sell its inventory. In general, the lower inventory turnover is bad for company. Because it means the company has a bad management of inventory. The accounts receivable turnover would be computed as:

$$Inventory\ Turnover = \frac{Costs\ Of\ Goods\ Sold}{Average\ Inventory} \ . \tag{2.18}$$

Total assets turnover measures how efficient a company is to generate revenues by using its assets. In general, the higher is the asset turnover ratio, the better for the company. Because higher total assets turnover indicates that the company can generate more revenue per currency of the asset. The total assets turnover would be computed as:

$$Assets\ Turnover = \frac{Revenues}{Total\ Assets} \tag{2.19}$$

2.3.5 DuPont analysis

DuPont analysis uses several major financial ratios to analyze the relationship between the company's financial situation. Specifically, it is a classic method used to evaluate the profitability of the company and the return of shareholders' equity, from the financial point of view of corporate performance. The basic idea is to decompose the return on net assets of enterprises into a number of financial ratio products, which will help in-depth analysis and comparison of business performance. Because this method is first used by the United States DuPont, named DuPont analysis.

First, we need to decompose the return on equity ratio(ROE) by three component ratios:

$$ROE = \frac{EAT}{Equity} = \frac{EAT}{Revenues} \cdot \frac{Revenues}{Total\ assets} \cdot \frac{Total\ assets}{Equity} \quad . \tag{2.20}$$

where $\left(\frac{EAT}{Revenues}\right)$ means net profit margin, $\left(\frac{Revenues}{Total\ assets}\right)$ means assets turnover, $\left(\frac{Total\ assets}{Equity}\right)$ means financial leverage.

Then we need to decompose the net profit margin by three component ratios:

$$\frac{EAT}{Revenues} = \frac{EAT}{EBT} \cdot \frac{EBT}{EBIT} \cdot \frac{EBIT}{Revenues}. \tag{2.21}$$

where $\left(\frac{EAT}{EBT}\right)$ means tax burden, $\left(\frac{EBT}{EBIT}\right)$ means interest burden, $\left(\frac{EBIT}{Revenues}\right)$ means operating margin.

After substitution into DuPont analysis, we can get:

$$ROE = \frac{EAT}{Equity} = \frac{EAT}{EBT} \cdot \frac{EBT}{EBIT} \cdot \frac{EBIT}{Revenues} \cdot \frac{Revenues}{Total\ assets} \cdot \frac{Total\ assets}{Equity} \quad . \tag{2.22}$$

Next, we will introduce influence quantification, which includes method of gradual changes, logarithmic decomposition method and functional decomposition method.

Methods of gradual changes works with absolute changes in component ratios, in the case of decomposition with 3 component ratios:

$$\Delta X a_1 = \Delta a_1 \cdot a_{2,0} \cdot a_{3,0}, \tag{2.23}$$

$$\Delta X a_2 = a_{1,1} \cdot \Delta a_2 \cdot a_{3,0}, \tag{2.24}$$

$$\Delta X a_3 = a_{1,1} \cdot a_{2,1} \cdot \Delta a_3, \tag{2.25}$$

where X is the basic ratio, ΔX is absolute change in the basic ratio, a is component ratio, Δa is absolute change in the component ratio, and Δa is absolute change in the basic ratio caused by the change in the first (a_1) component ratio.

Logarithmic decomposition method is easier when we calculate than methods of gradual changes. Because we only need one formula when we calculate regardless of how many component ratios we have. Impact of i-th component ratio on the change in the basic ratio is calculate as follows:

$$\Delta X a_i = \frac{lnI_{a_i}}{lnI_x} \cdot \Delta X. \tag{2.26}$$

where X is the basic ratio, ΔX is the absolute change in the basic ratio, $I_x = \frac{\mathrm{X}_1}{\mathrm{X}_0}$ is the index of change in the basic ratio, $I_a = \frac{a_1}{a_0}$ is the index of change in component ratio.

Functional decomposition method works with the relative changes in basic and component ratios. The formula is computed as follows:

$$\Delta X^{rel} = R_x = \frac{X_1 - X_0}{X_0}, \tag{2.27}$$

$$\Delta a_i{}^{rel} = R_{a_i} = \frac{a_1 - a_0}{a_0}, \tag{2.28}$$

Influence of the i-th component ratio on the basic ratio, the formula for calculation is follows:

$$\Delta X_{a_1} = \frac{1}{R_x} \cdot R_{a_1} \cdot \left(1 + \frac{1}{2} \cdot R_{a_2} + \frac{1}{2} \cdot R_{a_3} + \frac{1}{3} \cdot R_{a_2} \cdot R_{a_3}\right) \cdot \Delta X, \tag{2.29}$$

$$\Delta X_{a_2} = \frac{1}{R_x} \cdot R_{a_2} \cdot \left(1 + \frac{1}{2} \cdot R_{a_1} + \frac{1}{2} \cdot R_{a_3} + \frac{1}{3} \cdot R_{a_1} \cdot R_{a_3}\right) \cdot \Delta X, \tag{2.30}$$

$$\Delta X_{a_3} = \frac{1}{R_x} \cdot R_{a_3} \cdot \left(1 + \frac{1}{2} \cdot R_{a_1} + \frac{1}{2} \cdot R_{a_2} + \frac{1}{3} \cdot R_{a_1} \cdot R_{a_2}\right) \cdot \Delta X, \tag{2.31}$$

3 Financial characteristics of PRADA Company

In this chapter, we will describe the financial characteristics of PRADA Group. The financial characteristics of a company can reflect the company's current and future financial situation. Therefore, knowing the company's financial characteristics is quite necessary for conducting financial analysis of a company. Then, we will mainly focus on two parts: basic introduction of PRADA and common-size analysis of PRADA.

3.1 Introduction of the company

In this part, we will introduce some basic information about PRADA from three aspects: history, business model and competition.

"Careful observation of and curiosity about the world, society, and culture are at the core of Prada's creativity and modernity. This pursuit has pushed Prada beyond the physical limitations of boutiques and showrooms, provoked an interaction with different and seemingly distant worlds, and introduced a new way to create a natural, almost fashion less fashion."[1]

During the development of nearly a hundred years, PRADA has become a world-renowned legendary brand through the commitment to create both the classic color and innovative spirit of the concept of fashion. PRADA specializes in leather handbags, travel accessories, shoes, ready-to-wear, perfumes and other fashion accessories.

3.1.1 History of PRADA Company

PRADA was founded in 1913 by Mario Prada and his brother Martino as a leather goods shop in Milan, Italy. At first, the shop sold leather goods and imported English steamer trunks and handbags.

In 1978, PRADA was given new elements of development and vitality. Because Miuccia Prada, granddaughter of Mario Prada, took over the company in 1978. And she had a business partnership with Patrizio Bertelli, who had rich experience in producing luxury products at the time. Because of Miuccia's creativity in the company's designs and Patrizio's business mind. They lead PRADA into a new milestone.

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[1] Source: http://www.pradagroup.com/en/group/history

In the 1990s, PRADA has grown from a small family career to become the world's top luxury brand. A total of 166 directly operating Prada boutiques located in the world's major cities and tourist attractions. And PRADA Group includes Prada, Jil Sander, Church's, Helmut Lang, Genny and Car Shoe and other prestigious international brands.

In the 2000s, PRADA's trading and buying sprees slowed. But PRADA was still a worldwide empire in the field of luxuries. The Prada brand ranked 81st in Interbrand's top 100 most valuable global brands in 2016.

3.1.2 Business model of PRADA Company

There are four stages in the business cycle of PRADA. They are style & design and product development, collection of orders, sourcing and production, sales and distribution. And the whole business cycle of PRADA requires the product designing teams and product manufacturing teams to coordinate and cooperate closely. Only if they work together very well, can they adhere to the unique original design style, regulate the production of products, and adhere to the principle of high quality.

Style & design and product development

At this stage, PRADA develops and produces the overwhelming majority of archetypes and most of the specimen in the internal facilities to keep control over the outsourcing products' qualities and monitoring costs.

Collection of orders

The new series is displayed in each brand's exhibition room, so it's convenient for PRADA's retail channels and wholesale customers to order for products.

Sourcing and production

PRADA chooses suppliers strictly to make sure the quality of the sourcing of the products. production of products sites in Italy and the U.K. The network covers about 480 producers. And PRADA sets up special inspectors to monitor the entire production cycle and product quality.

Sales and distribution

The product is sold via sales network DOS to enable luxury multi-brand stores, department stores and franchise stores for distribution.

3.1.3 Competition

PRADA faces many competitors such as Louis Vuitton, Gucci, Michael Kors, Hermes, etc. To keep the competitive advantages in the fierce competition, we need to conduct SWOT analysis of PRADA.

The strengths of PRADA are high qualities of products, unique fashion style, long history of development of the brand, great brand effect. The weakness of PRADA are fierce competition of the same level of brand and negative impact of the fakes. The opportunities of PRADA are: enter the emerging markets, the use of digital media to increase its range of unavailability, cooperate with some elite clubs. So, these opportunities are also the key for PRADA to keep competitive power. The threats of PRADA are: dependence on luxury fashion may be reduced because of the changes of economy, economic conditions may affect its business because of the essence of global brand. So, PRADA also need to conquer these threats to win success.

3.2 Common-size analysis of PRADA Company

In this part, we will conduct common-size analysis for PRADA which includes vertical and horizontal common-size analysis. The following Tab.3.1 and Tab.3.2 are shown as the simple balance sheet and income statement of PRADA from 2012 to 2016

Tab.3.1 Simple balance sheet of PRADA from 2012 to 2016 (1,000 euro)

	2012	2013	2014	2015	2016
Long-term assets	1 826 065	1 997 830	2 426 696	2 838 922	2 868 117
Current assets	1 117 503	1 387 449	1 461 596	1 899 955	1 888 438
Total assets	2 943 568	3 385 279	3 888 292	4 738 877	4 756 555
Long-term liabilities	396 017	312 725	480 277	605 705	867 359
Current liabilities	716 584	742 062	706 475	1 115 025	791 819
Total liabilities	1 112 601	1 054 787	1 186 752	1 720 730	1 659 178
Shareholders' equity	1 830 967	2 330 492	2 701 540	3 018 147	3 097 377

As is shown in the Tab.3.1, the total assets of PRADA have increased year by year because of the increase of both long-term and current assets year by year. But the long-term assets are higher than current assets. The tendency of total liabilities is variable. From 2012 to 2013, the total liabilities slightly reduced. From 2013 to 2015, the total liabilities have increased year by year. But from 2015 to 2016, total liabilities decreased again. And the current

liabilities are much higher than long-term liabilities. The shareholders' equity has increased year by year, and the growth rate is quite fast.

Tab.3.2 Simple income statement of PRADA from 2012 to 2016(1,000 euro)

	2012	2013	2014	2015	2016
Revenues	2 555 606	3 297 219	3 587 347	3 551 696	3 547 771
Cost of goods sold	-727 581	-920 678	-938 698	-1 001 117	-980 206
Gross profit	1 828 025	2 376 541	2 648 649	2 550 579	2 567 565
Operating expenses	-1 199 090	-1 486 760	-1 709 412	-1 849 028	-2 064 672
EBIT	628 935	889 781	939 237	701 551	502 893
Interest	-26 027	-7 131	-17 357	-34 304	-29 872
Dividend received	0	966	1 016	455	2 311
EBT	602 908	883 616	922 896	667 702	475 332
Taxation	-166 483	-250 339	-285 091	-208 484	-141 994
EAT	436 425	633 277	637 805	459 218	333 338

As is shown in the Tab.3.2, from 2012 to 2014, revenues of PRADA have increased constantly with a large amount, but from 2014 to 2016, revenues decreased slightly. And we can also find that the tendency of the changes in revenues is as same as the earning before tax and net profit. In fact, we can see that the taxation increased from 2012 to 2014 and decreased from 2014 to 2016. But the impact of taxation far from the impact of revenues, It means that even if the taxation decreased, the net profit still decreased because of the decline of the revenues.

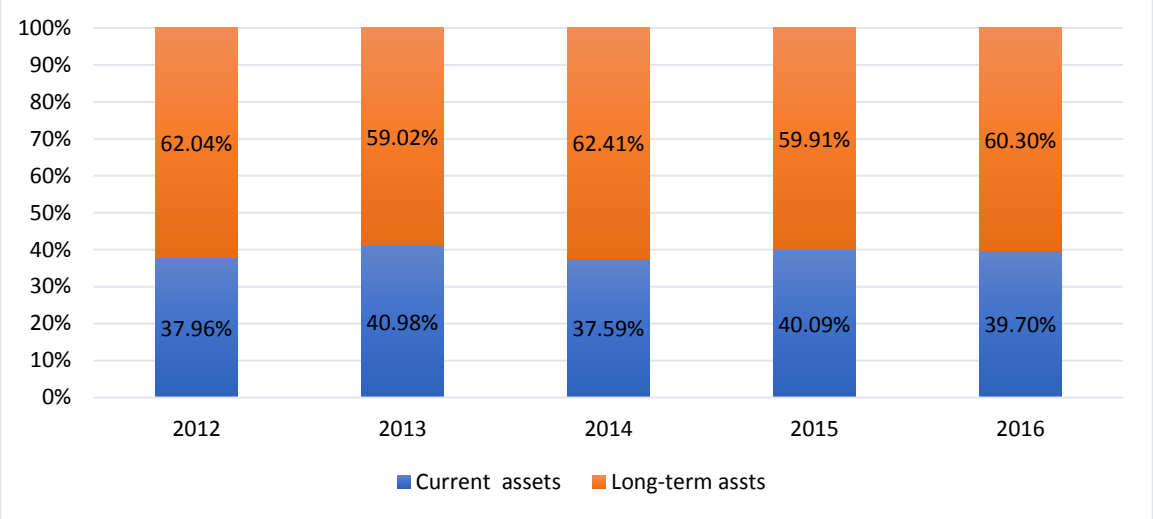
3.2.1 Vertical common-size analysis of PRADA Company

In this part, we will conduct vertical common-size analysis of PRADA. The procedure of conducting vertical common-size analysis is: First, we need to choose some benchmarks such as total assets, total revenues, total liabilities and equity and total expenses, etc. Then, we need to calculate proportion of every item in those benchmarks. In the end, we will compare these results evolutions over time. The following Tab 3.3 and Chart 3.1 shows the proportion of each items in total assets.

Tab.3.3 The proportion of each item in total assets from 2012 to 2016 (%)

	2012	2013	2014	2015	2016
Long-term assets	62.04	59.02	62.41	59.91	60.30
Current assets	37.96	40.98	37.59	40.09	39.70
Cash and cash equivalents	12.31	16.89	14.62	14.96	14.31
Trade receivables	9.05	9.00	7.93	7.31	5.34
Inventories	12.73	10.16	11.57	13.81	14.56
Derivative financial instruments	0.03	1.27	0.36	0.13	0.25
Other receivables	0.44	0.58	0.15	0.07	0.41
Other current assets	3.41	3.10	2.95	3.81	4.83
Total assets	100.00	100.00	100.00	100.00	100.00

Chart.3.1 Vertical common-size analysis of assets from 2012 to 2016.



Combined with the above Tab 3.3 and Chart 3.1, we can see that from 2012 to 2016, the proportion of long-term assets in total assets was always higher than the proportion of current assets in total assets. However, the capital structure didn't change too much, it was kept almost in the same level. In general, the higher the proportion of current assets, the greater the ability of enterprises to bear the financial risk. But from the profit point of view, if the proportion of current assets is too high, it's not a good thing. Because the long-term assets such as the financial investments can bring more profits for the company than the current assets. And as for the proportion of long-term assets, generally the lower result of it is better because too high proportion of long-term assets will cause some problems such as huge maintenance costs. So, from the Chart 3.1, we can see that the structure of current and long-term assets is fine, but it

will be better if PRADA make some efforts to slightly lower the proportion of long-term assets.

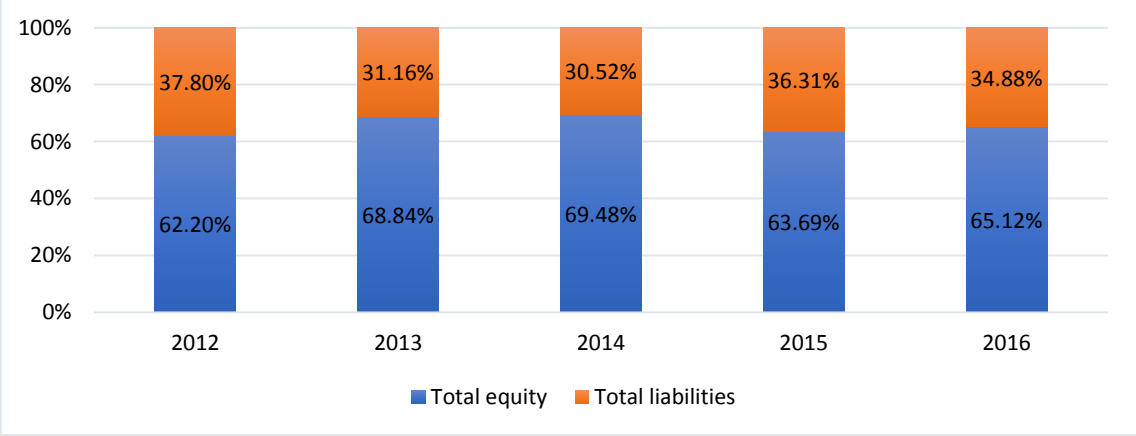
And we can see the proportion of each items in current assets. Cash and cash equivalents occupied the highest proportion in current assets. It's reasonable because it guarantees the liquidity of the company. The general trend of the amounts of inventories from 2012 to 2013 was decreasing. It is because that PRADA significantly reduced the introduction of new products to slow down the problem of inventory backlog. However, from 2013 to 2016, there was a huge increase in inventories. It is because Prada wanted to regain competitiveness in the luxury markets.

Then we need to conduct vertical common-size analysis in equity and liabilities. The following Tab 3.4 and Chart 3.2 shows the proportion of each item in total equity and liabilities.

Tab.3.4 The proportion of each item in total equity and liabilities from 2012 to 2016 (%).

	2012	2013	2014	2015	2016
Long-term liabilities	13.45	9.24	12.35	12.78	18.24
Current liabilities	24.34	21.92	18.17	23.53	16.65
Total liabilities	37.80	31.16	30.52	36.31	34.88
Total equity	62.20	68.84	69.48	63.69	65.12
Total equity and liabilities	100.00	100.00	100.00	100.00	100.00

Chart.3.2 Vertical common-size analysis in equity and liabilities from 2012 to 2016.



From Tab 3.4 we can see that the proportion of current liabilities was higher than the proportion of long-term liabilities during these years. Because the costs of current liabilities are

relatively cheaper than long-term liabilities. However, it was not so good for PRADA or other company. Because the maturity of current liability is shorter than long-term liability's, which means that too much current liabilities will increase the burden of paying back debts for the company.

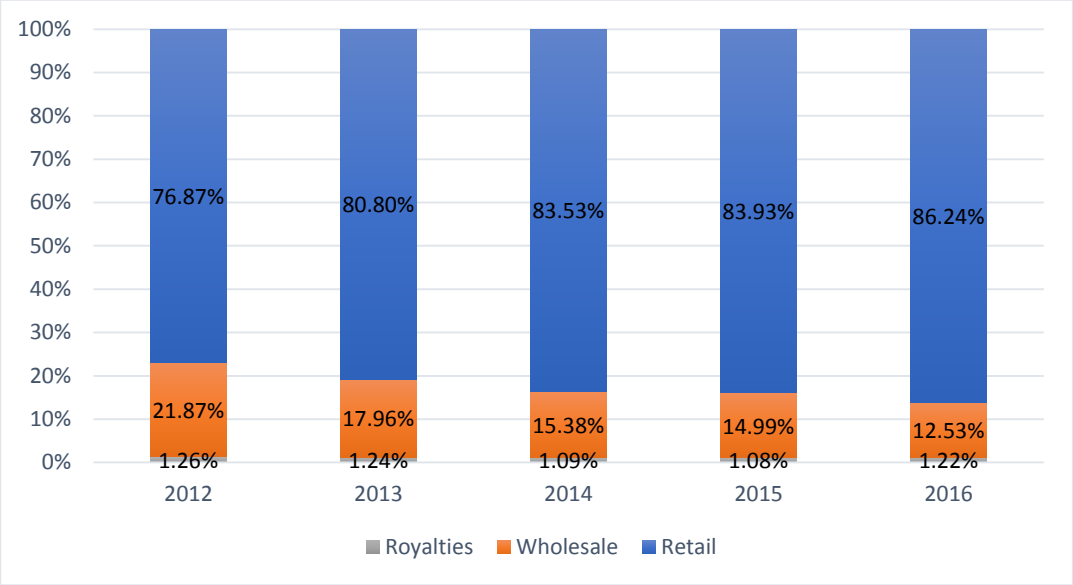
From Chart 3.2 we can see that the proportion of equity in equity and liabilities was always higher than the proportion of liabilities during these five years. It also means that PRADA raise funds mainly by equity financing. Specially, from 2012 to 2014, the growth rate of the proportion of total equity in equity and liabilities increased fast. Although from 2014 to 2016, it decreased a little bit. The overall trend was rising.

Then we will conduct vertical common-size analysis in revenues. The proportion of each item in revenues is shown in Tab 3.5 and Chart 3.3.

Tab.3.5 The proportion of each item in revenues from 2012 to 2016 (%).

	2012	2013	2014	2015	2016
Retail	76.87	80.80	83.53	83.93	86.24
Wholesale	21.87	17.96	15.38	14.99	12.53
Royalties	1.26	1.24	1.09	1.08	1.22
Total revenues	100.00	100.00	100.00	100.00	100.00

Chart 3.3 Vertical common-size analysis of revenues from 2012 to 2016.



From the above Tab 3.5 and Chart 3.3 we can see that the main source of total revenues was retail. And the proportion of royalties in total revenues was the lowest. Because PRADA

has been committed to expand its retail network, the number of outlets is gradually increased. Because the huge retail network provides an effective platform for its new product display, and it's also the key to contact with customers.

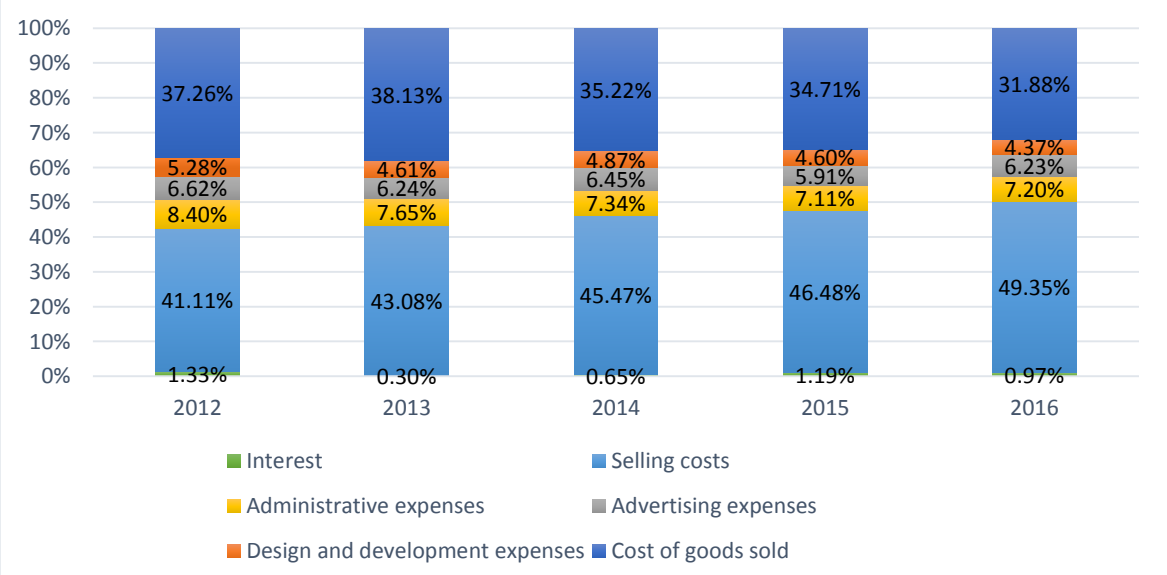
Then we can compare the proportion of retail with proportion of wholesale in total revenues. We can see that retail can bring higher revenues than wholesale. It's because of the development of the retail network. The growth of the luxury market is mainly achieved through the expansion of the retail network. So, as one of the luxury brands, PRADA also gains revenues through the way of retail. And as for the proportion of royalties in revenues, it's quite stable during these years. The main source of royalties are licensed products, essentially eyewear and cosmetics.

Then we will conduct vertical common-size analysis in expenses. The proportion of each item in expenses is shown in Tab 3.6 and Chart 3.4.

Tab 3.6 The proportion of each item in expenses from 2012 to 2016 (%).

	2012	2013	2014	2015	2016
Cost of goods sold	37.26	38.13	35.22	34.71	31.88
Design and development expenses	5.28	4.61	4.87	4.60	4.37
Advertising expenses	6.62	6.24	6.45	5.91	6.23
Administrative expenses	8.40	7.65	7.34	7.11	7.20
Selling costs	41.11	43.08	45.47	46.48	49.35
Interest	1.33	0.30	0.65	1.19	0.97

Chart 3.4 Vertical common-size analysis of expenses from 2012 to 2016.



From the above Tab 3.6 and Chart 3.4, we can see that selling costs accounted for the highest proportion of total expenses during these years and selling costs also increased year by year. It is because of the constant expansion and renewal of the DOS network.

And the proportion of advertising expenses and design and development expenses were relatively stable during these years. Because advertising costs are indispensable for Prada to maintain the level of profitability, primarily through brand sponsorship, institutional activities and some special projects to enhance brand awareness. And as an original fashion brand, it's quite necessary for Prada to put a lot of effort in design and development to keep the competitiveness.

The proportion of interest in total expenses was quite low during these years. The low interest expense was mainly due to the difference in the composition of average liabilities and financial payables. And the group's corporate strategy focus only on low-risk investment.

3.3.3 Horizontal common-size analysis of PRADA Company

In this part, we will conduct horizontal common-size analysis of PRADA. The procedure of conducting horizontal common-size analysis is: First, we need to choose some benchmarks in a given period of time. Then, we need to calculate the absolute change of each item. In the end, we need to compare the percentage change of them. The following Tab.3.7 shows the absolute change of each item in balance sheet. Tab.3.8 shows the percentage change of each item in balance sheet.

Tab.3.7 Absolute change of each item in balance sheet (1000 euro).

	2012/2013	2013/2014	2014/2015	2015/2016
Long-term assets	171 765	428 866	412 226	29 195
Current assets	269 946	74 147	438 359	-11 517
Total assets	441 711	503 013	850 585	17 678
Long-term liabilities	-83 292	167 552	125 428	261 654
Current liabilities	25 478	-35 587	408 550	-323 206
Total liabilities	-57 814	131 965	533 978	-61 552
Shareholders' equity	499 525	371 048	316 607	79 230

Tab.3.8 Percentage change of each item in balance sheet (%).

	2012/2013	2013/2014	2014/2015	2015/2016
Long-term assets	9.41	21.47	16.99	1.03
Current assets	24.16	5.34	29.99	-0.61
Total assets	15.01	14.86	21.88	0.37
Long-term liabilities	-21.03	53.58	26.12	43.20
Current liabilities	3.56	-4.80	57.83	-28.99
Total liabilities	-5.20	12.51	44.99	-3.58
Shareholders' equity	27.28	15.92	11.72	2.63

From Tab 3.7, we can see that from 2012 to 2016, items such as long-term assets, total assets and shareholders' equity increased year by year. But the degree of increasing is different. And other items such as current assets and liabilities and total liabilities sometimes increased and sometimes decreased by compared with the year before. Then we will explain the reasons for those changes one by one.

The reason why total assets increased year by year was because the increase of both long-term assets and current assets. First, we will talk about the long-term assets. Prada has always reset up equipment and intangible assets such as good will, and conducted purchase upgrades. So, the long-term assets increased constantly. Then, we will talk about current assets, the increase of current assets was due to the higher and higher value of retail inventories and the increasing number of stores opening.

Then, we can see that there was a huge increase of total liabilities from 2014 to 2015. It is because that the increase of current liabilities. And the increase of the current liabilities were mainly because they were used to pay for the derivatives to hedge foreign exchange risk, and coping with capital expenditures.

From Tab 3.8, we can see that there was a significant decline of percentage change of shareholders' equity from 2012/2013 to 2015/2016. And specially from 2014/2015 to 2015/2016, the growth speed slowed down rapidly. On 23 March 2015, the close price of the share was 6.1 euro, but on 12 January 2016, the close price of the share was only 2.42 euro. And it also caused the shareholders' equity decreased rapidly.

Then, we will conduct horizontal common-size analysis of income statement. The following Tab.3.9 shows the absolute change of each item in income statement. And the

Tab.3.10 shows the percentage change of each item in income statement.

Tab.3.9 Absolute change of each item in income statement (1000 euro).

	2012/2013	2013/2014	2014/2015	2015/2016
Revenues	741 613	290 128	-35 651	-3 925
Cost of goods sold	-193 097	-18 020	-62 419	20 911
Gross profit	548 516	272 108	-98 070	16 986
Operating expenses	-287 670	-222 652	-139 616	-215 644
EBIT	260 846	49 456	-237 686	-198 658
Interest	18 896	-10 226	-16 947	4 432
Dividend received	966	50	-561	1 856
EBT	280 708	39 280	-255 194	-192 370
Taxation	-83 856	-34 752	76 607	66 490
EAT	196 852	4 528	-178 587	-125 880

Tab.3.10 Percentage change of each item in income statement (%).

	2012/2013	2013/2014	2014/2015	2015/2016
Revenues	29.02	8.80	-0.99	-0.11
Cost of goods sold	26.54	1.96	6.65	-2.09
Gross profit	30.01	11.45	-3.70	0.67
Operating expenses	23.99	14.98	8.17	11.66
EBIT	41.47	5.56	-25.31	-28.32
Interest	-72.60	143.40	97.64	-12.92
Dividend received	0	5.18	-55.22	407.91
EBT	46.56	4.45	-27.65	-28.81
Taxation	50.37	13.88	-26.87	-31.89
EAT	45.11	0.72	-28.00	-27.41

From Tab 3.9, we can see that revenue of PRADA increased from 2012/2013 to 2013/2014 and decreased from 2014/2015 to 2015/2016. As a luxury goods company, there was an incident of designing of PRADA and it caused the PRADA company lost some competitive power with GUCCI and CHANEL, etc. And in response to the slowdown in sales of some areas because of the recurring but unpredictable changes in the economic environment, managers of PRADA had taken a series of measures to limit the pressure on operating.

Then we can see that operating expense always increased from 2012 to 2016. Because the

manager of company wanted to create more retail in Japan, China and Middle East. After all, Asia Pacific market has always been the leading market of PRADA. And the PRADA always looked forward to expanding its business and kept the competitiveness. So, operating expense of PRADA increased directly year by year. However, on the other hand it also caused more burden for the PRADA.

The general trend of earnings after tax of PRADA was decreasing. Because in 2014/2015 the PRADA had worse performance in the Asia and China market, so it didn't perform well around other same level luxury goods company in 2014. But in 2015 the earnings after tax has increased because of the sales of abroad market increased. So, it will cause the earnings after tax of PRADA company increased. And another reason that caused the earning after tax increased from 2015 to 2016 was the decreasing of taxation. The total income taxes decreased because of a different geographical distribution of taxable income and tax losses.

4 Financial analysis of PRADA Company

In this chapter, we will conduct financial analysis by calculating some financial ratio and by using DuPont analysis which both are already mentioned in chapter 2 to estimate the financial condition of PRADA.

And this chapter includes six parts: profitability ratios of PRADA, liquidity ratios of PRADA, solvency ratios of PRADA, activity ratios of PRADA and DuPont analysis of PRADA.

4.1 Profitability ratios of PRADA Company

In this part, we will calculate the results of return on assets, return on equity, net profit margin and operating margin to analyze the profitability of PRADA from 2012 to 2016. First, we will analyze return on assets of PRADA.

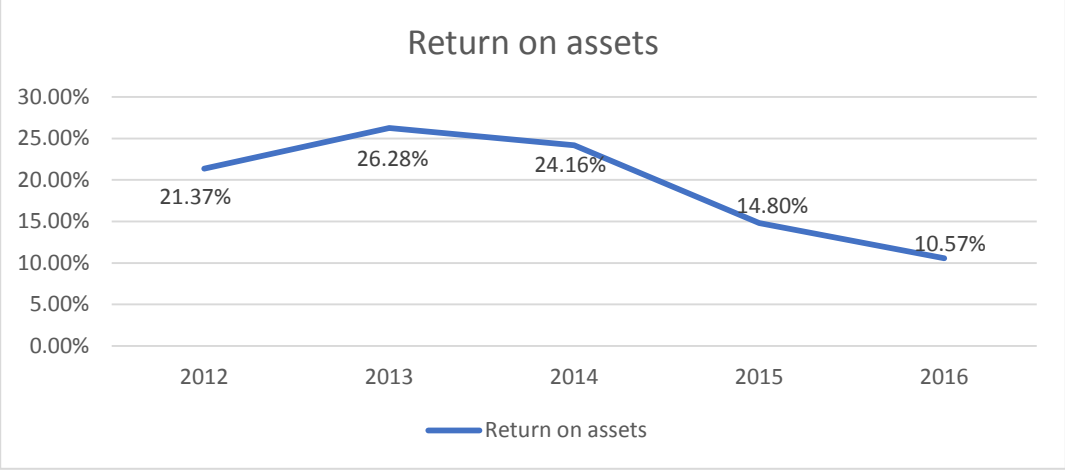
4.1.1 Return on assets

Tab 4.1 shows the return on assets of PRADA, Chart 4.1 shows the trend of return on assets of PRADA.

Tab. 4.1 Return on assets of PRADA from 2012 to 2016 (%).

	2012	2013	2014	2015	2016
Return on assets	21.37	26.28	24.16	14.80	10.57

Chart 4.1 Trend of return on assets from 2012 to 2016.



From Tab 4.1, we can see that return on assets of PRADA increased from 2012 to 2013,

but declined sharply from 2013 to 2016. The reason why there was a rise of return on assets from 2012 to 2013 was because that EBIT increased from 2012 to 2013, although total assets also increased from 2012 to 2013, the increase in EBIT was much greater than the increase in total assets. We can see the data from chapter 3, the percentage change of total assets of 2012/2013 was 15.01%, however, the percentage change of EBIT of 2012/2013 was 41.47%. So, it was not hard to understand why there was a rise from 2012 to 2013. And the reason why there was a decline of return on assets from 2013 to 2016 was because that there was a significant decline of EBIT from 2014 to 2016, and the total assets always increased from 2012 to 2016. So, according to the formula of return on assets, it was clear that the return on assets would decline from 2013 to 2016.

And we can see from the Chart 4.1 that the general trend of return on assets of PRADA was descending from 2012 to 2016. Because the general, the gross trend of the EBIT was declining, and on the contrary to it, the general trend of total assets was increasing. The decline of EBIT mainly due to the increase of operating expenses. PRADA wanted to expand its business scale and kept the competitiveness in the leading market of Asia Pacific. So, operating expense of PRADA increased directly year by year.

As we have explained in chapter 2, the higher return on assets is, the better for the company. Because the company will earn more money with less investment. So, from both of the Tab 4.1 and Chart 4.1, we can see that PRADA performed best in the way of gaining profit in 2013, and performed worst in the way of gaining profit in 2016 during these years.

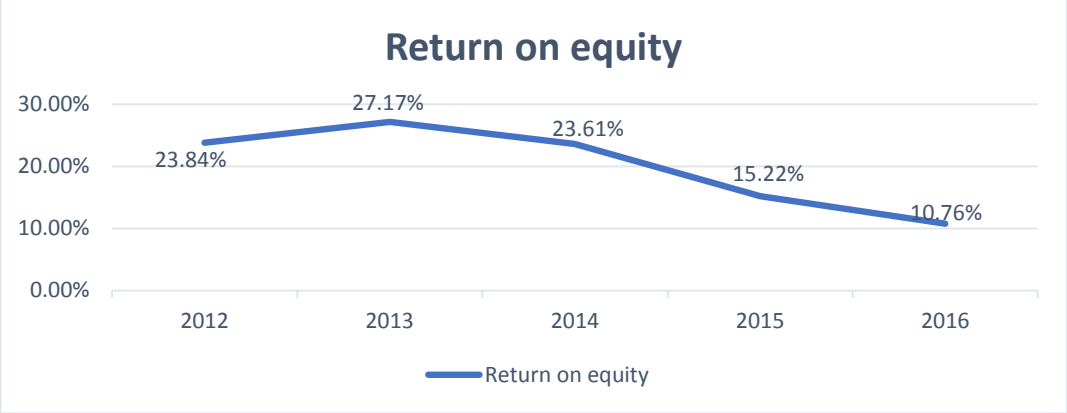
4.1.2 Return on equity

Tab 4.2 shows the return on equity of PRADA, Chart 4.2 shows the trend of return on equity of PRADA.

Tab. 4.2 Return on equity of PRADA from 2012 to 2016 (%).

	2012	2013	2014	2015	2016
Return on equity	23.84	27.17	23.61	15.22	10.76

Chart 4.2 Trend of return on equity from 2012 to 2016.



From Tab 4.2, we can see that the general trend of return on equity from 2012 to 2016 was similar to return on assets of PRADA. The return on equity increased from 2012 to 2013, but declined sharply from 2013 to 2016. The reason why there was a rise of return on equity from 2012 to 2013 was because that EAT increased from 2012 to 2013, although equity also increased from 2012 to 2013, the increase in EAT was much greater than the increase in total assets. We can see the data from chapter 3, the percentage change of equity of 2012/2013 was 27.28%, however, the percentage change of EAT of 2012/2013 was 45.11%. So, it was easy to understand why there was a rise from 2012 to 2013. And the reason why there was a decline of return on equity from 2013 to 2016 was because that there was a significant decline of EAT from 2014 to 2016, and the equity always increased from 2012 to 2016. So, according to the formula of return on equity, it was clear that the return on equity would decline from 2013 to 2016.

And we can see from the Chart 4.2 that the gross trend of return on equity of PRADA was declining from 2012 to 2016. Because the general, the gross trend of the EAT was declining, and it was opposite of the general trend of total assets which was increasing. The decline of EAT mainly due to the decrease of EBT and general increase of taxation. And the increase of equity mainly due to the gross rise of the stock price of PRADA's shares during these years. And because of the strategy of expanding business scale of PRADA, PRADA has attracted more and more investment.

As we have mentioned in chapter 2 that the higher return on equity is, the better for the company. Because the ratio reveals the ability of the company to generate profit with the money that shareholders have invested. So from the above Tab 4.2 and Chart 4.2, it was not hard to see

that PRADA performed best in the way of generating profit with the money invested by shareholders in 2013 and performed worst in 2016 during these years.

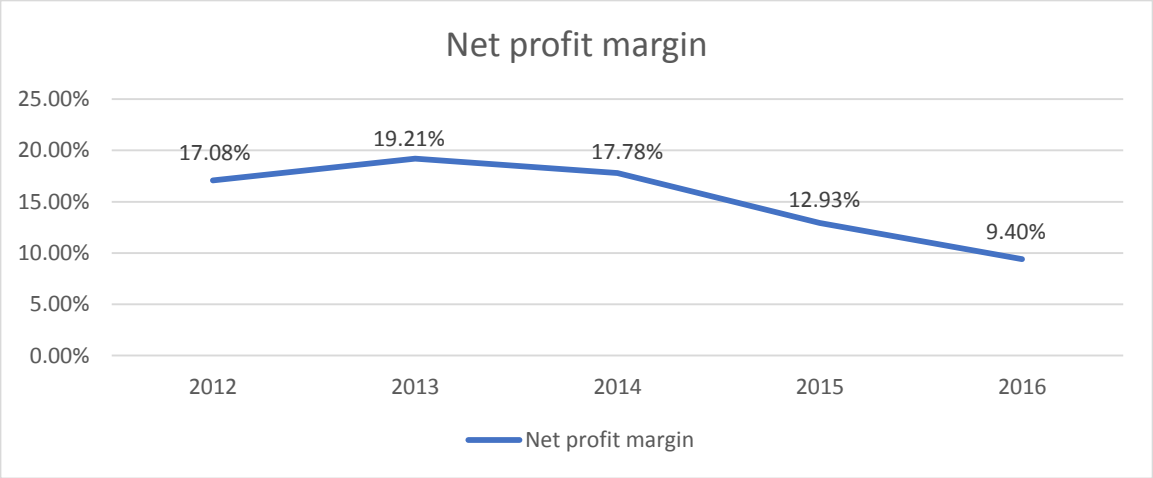
4.1.3 Net profit margin

Tab 4.3 shows the net profit margin of PRADA, Chart 4.3 shows the trend of net profit margin of PRADA.

Tab. 4.3 Net profit margin of PRADA from 2012 to 2016 (%).

	2012	2013	2014	2015	2016
Net profit margin	17.08	19.21	17.78	12.93	9.40

Chart 4.3 Trend of net profit margin from 2012 to 2016.



From Tab 4.3, we can see that net profit margin of PRADA increased from 2012 to 2013, this is because that EAT increased from 2012 to 2013, although revenues also increased from 2012 to 2013, the increase in EAT was much higher than the increase in revenues. We can find the data from chapter 3, the percentage change of revenues of 2012/2013 was 29.02%, nevertheless, the percentage change of EAT of 2012/2013 was 45.11%. But net profit margin declined sharply from 2013 to 2016. because that there was a significant decline of EAT from 2014 to 2016, and the revenue always increased from 2012 to 2016. So, according to the formula of net profit margin, it was clear that the net profit margin would decline from 2013 to 2016.

And we can see from the Chart 4.3 that the gross trend of net profit margin of PRADA was declining from 2012 to 2016. Because the general, the gross trend of the EAT was declining, and on the contrary, the general trend of revenue was increasing. The constantly rise of revenue

was because that the products of PRADA can always keep pace with the times. It makes PRADA easier to attract more and more consumers with different ages and different occupation.

As we have introduced in chapter 2, net profit margin reveals how much money generated by company as revenues switch into profit. So, if the ratio is high, it means that there is much more money generated as revenues switch into profit. It's also good for a company. From the above Tab 4.3 and Chart 4.3 we can learn that in 2013, the ability that PRADA generated profit from revenues was the best during these years and in 2016, it was the worst.

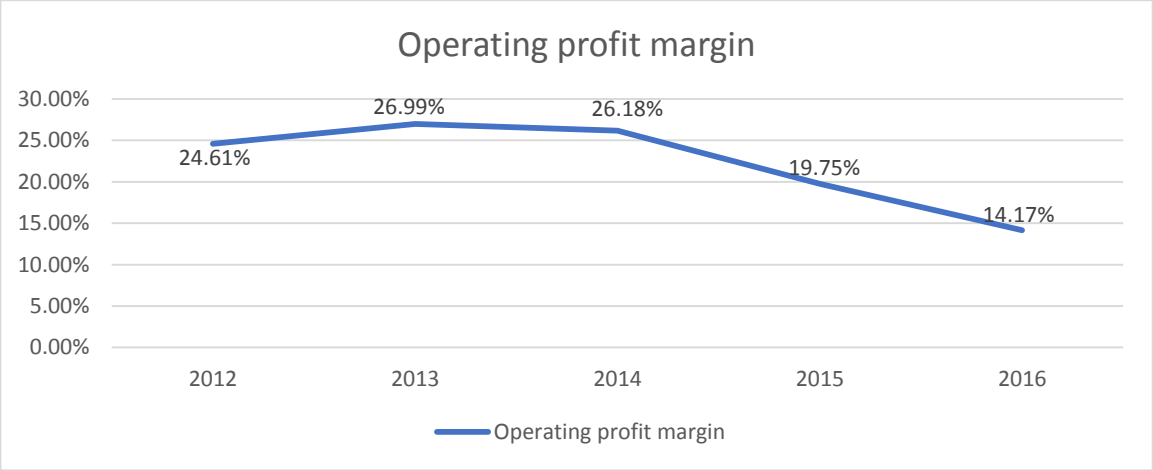
4.1.4 Operating profit margin

Tab 4.4 shows the operating profit margin of PRADA, Chart 4.4 shows the trend of operating profit margin of PRADA.

Tab. 4.4 Operating profit margin of PRADA from 2012 to 2016 (%).

	2012	2013	2014	2015	2016
Operating profit margin	24.61	26.99	26.18	19.75	14.17

Chart 4.4 Trend of operating profit margin from 2012 to 2016.



From Tab 4.4, we can see that operating profit margin of PRADA increased from 2012 to 2013, but declined sharply from 2013 to 2016. The reason why there was a rise of operating profit margin from 2012 to 2013 was because that EBIT increased from 2012 to 2013, although revenues also increased from 2012 to 2013, the increase in EBIT was much greater than the increase in revenues. We can see the data from chapter 3, the percentage change of revenues of 2012/2013 was 29.02%, however, the percentage change of EBIT of 2012/2013 was 41.47%. So, it was not hard to understand why there was a rise from 2012 to 2013. And the reason why

there was a decline of operating profit margin from 2013 to 2016 was because that there was a significant decline of EBIT from 2014 to 2016, and the revenues always increased from 2012 to 2016. So, according to the formula of operating profit margin, it was clear that the operating profit margin would decline from 2013 to 2016.

The operating profit margin is mainly used for estimating the strategy of a company's pricing and operating. As we described in chapter 2, the higher the operating profit margin is, the better for the company. So, we can see that PRADA performed best in the way of generating revenues with controlling operating costs well in 2013 and performed worst in 2016 during these years.

In summary of above four kinds of profitability ratios, we can see that whichever ratio we select to analyze the ability of PRADA to generate profit, PRADA always performed best in 2013 and performed worst in 2016 during these years. This is because 2013 is the peak period of PRADA, the group's global profits surged 44.9%, and there were 130 stores (28% of the number of stores worldwide) in Asia-Pacific region and they generated sales that exceeded billion euros for the first time. However, from 2013 to 2016, PRADA encountered Waterloo because of the bad performance in Asia-Pacific region.

4.2 Liquidity ratios of PRADA Company

In this part, we will analyze liquidity of PRADA by using some liquidity ratios. Liquidity of a company means the ability to pay for short-term debts. Liquidity ratios include current ratio, quick ratio and cash ratio. First, we will analyze current ratio of PRADA.

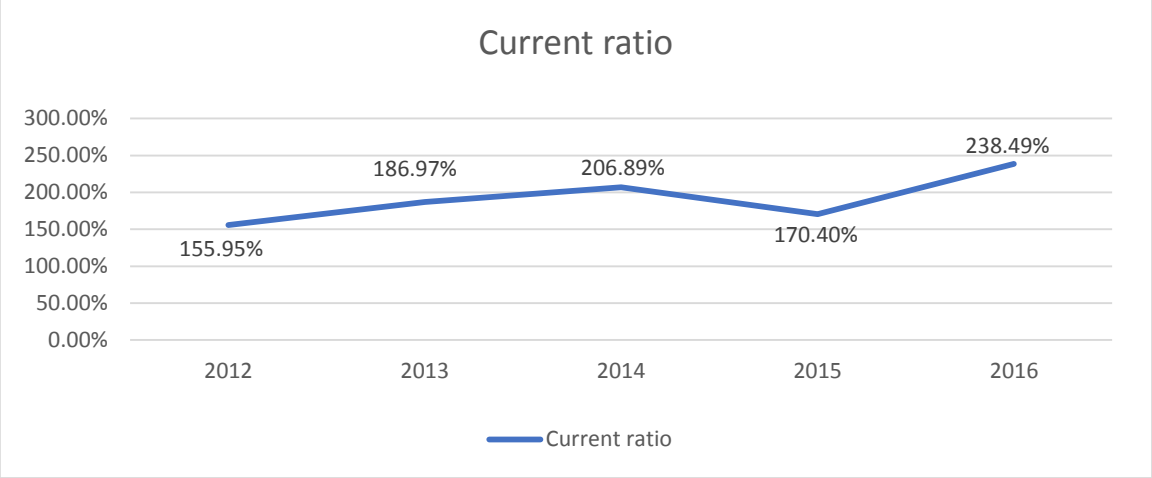
4.2.1 Current ratio

Tab 4.5 shows the current ratio of PRADA, Chart 4.5 shows the trend of current ratio of PRADA.

Tab. 4.5 Current ratio of PRADA from 2012 to 2016 (%).

	2012	2013	2014	2015	2016
Current ratio	155.95	186.97	206.89	170.40	238.49

Chart 4.5 Trend of current ratio from 2012 to 2016.



From Tab 4.5 we can see that current assets were always more than current liabilities during these years. Because current ratio was always higher than 1. From Chart 4.5 we can see that current ratio increased from 2012 to 2014. However, it declined sharply from 2014 to 2015. It is because that although both of current assets and current liabilities increased from 2014 to2015, the percentage change of current assets was lower than percentage change of current liabilities in 2014/2015. We can see the data in chapter 3. The percentage change of current assets in 2014/2015 was 29.99%, but the percentage change of current liabilities in 2014/2015 was 57.83%.

The reason why there was a huge increase in current liabilities from 2014 to 2015 was because PRADA needed to pay for the derivatives to hedge foreign exchange risk, and coping with capital expenditures. And the main advantage of current liabilities is that the costs of them are relatively cheaper than long-term liabilities. So, PRADA needed to borrow short-term debts to conquer these problems.

As we have learned from chapter 2, the higher the current ratio is, the more capable the company can pay for its obligations. So, we can see that PRADA was the most capable to pay for its obligations in 2016 during these years.

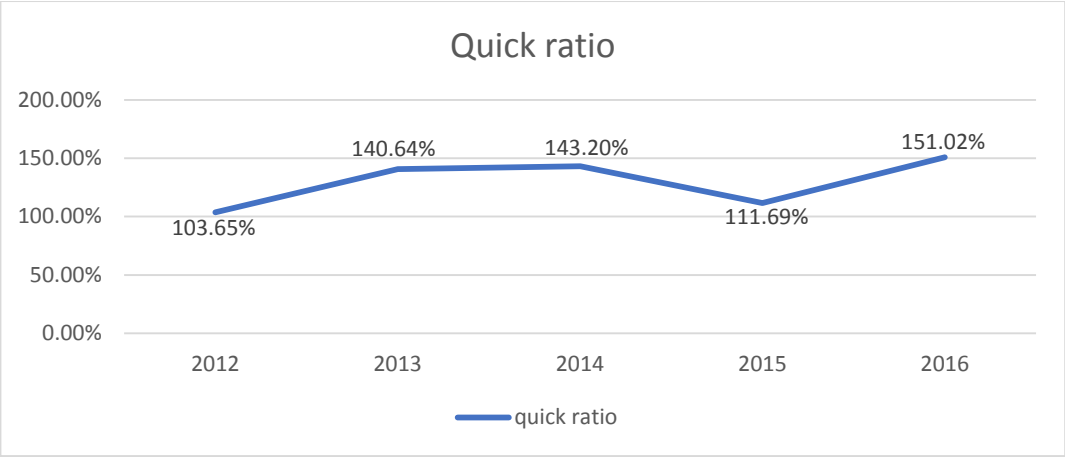
4.2.2 Quick ratio

Tab 4.6 shows the quick ratio of PRADA, Chart 4.6 shows the trend of quick ratio of PRADA.

Tab. 4.6 Quick ratio of PRADA from 2012 to 2016 (%).

	2012	2013	2014	2015	2016
Quick ratio	103.65	140.64	143.20	111.69	151.02

Chart 4.6 Trend of quick ratio from 2012 to 2016.



From Chart 4.6, we can see that the general trend of quick ratio was similar to the trend of current ratio from 2012 to 2016. But the changes of quick ratio were not as much as current ratio.

As is shown in Chart 4.6, there was a huge increase of quick ratio from 2012 to 2014, but also a huge decline from 2014 to 2015.It was because that although inventories of PRADA always increased during these years, the rate of its rise from 2014 to 2015 was far more than the rate of current assets' rise. So, it explained why there was a huge decline of quick ratio from 2014 to 2015.

PRADA have always kept pace with times and have always designed new products for every year. But from 2014 to 2015, as we have mentioned before, because of PRADA encountered Waterloo, there was a decline of the sales of products. And it caused the problem of product backlog. So, there was a huge increase in inventories.

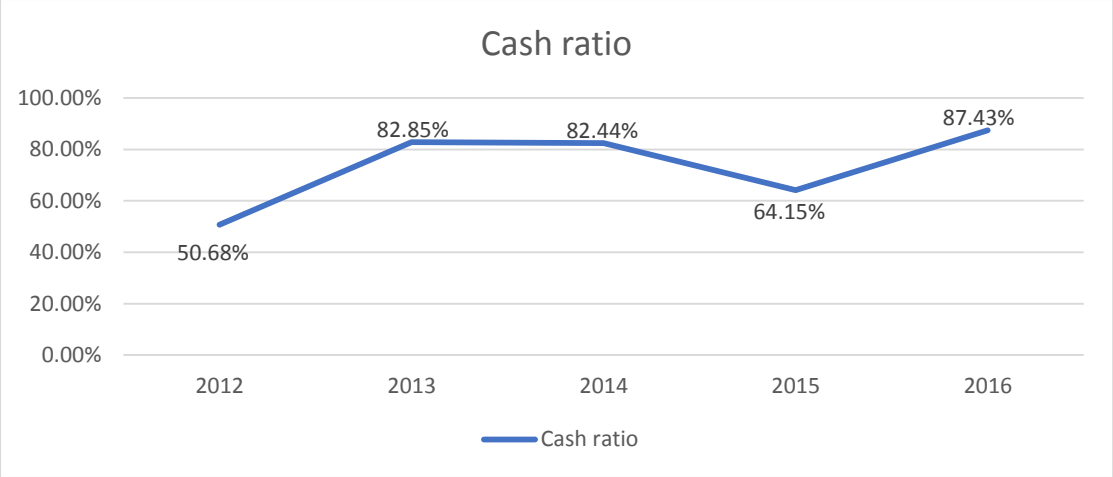
4.2.3 Cash ratio

Tab 4.7 shows the cash ratio of PRADA, Chart 4.7 shows the trend of cash ratio of PRADA.

Tab. 4.7 Cash ratio of PRADA from 2012 to 2016 (%).

	2012	2013	2014	2015	2016
Cash ratio	50.68	82.85	82.44	64.15	87.43

Chart 4.7 Trend of cash ratio from 2012 to 2016.



From Chart 4.7, we can see that the general trend of cash ratio from 2012 to 2016 was similar to current ratio and quick ratio. But the cash ratio was lower than 1 which meant that cash and market securities are lower than current liabilities. And we can see that cash ratio was really low in 2012. Because the amount of market securities was very low in 2012. It was only 894 (1000 euro). The market securities and cash are very important for a company to repay short-term debts.

As we have known in chapter 2, the higher cash ratio is, the stronger ability of the company to cover its short-term debts. So in 2016, PRADA had the strongest ability to pay for the short-term debts and had the weakest ability to pay for the short-term debts in 2012 during these years.

4.3 Solvency ratios of PRADA Company

In this part, we will analyze solvency of PRADA by using some solvency ratios. Solvency of a company means the ability to pay for long-term debts. The main difference between liquidity and solvency is that the former focus on the ability of a company to pay for short-term obligations, the latter focus on the ability of a company to pay for long-term obligations. Solvency ratios include debt ratio, debt to equity ratio and interest coverage. First, we will analyze debt ratio of PRADA.

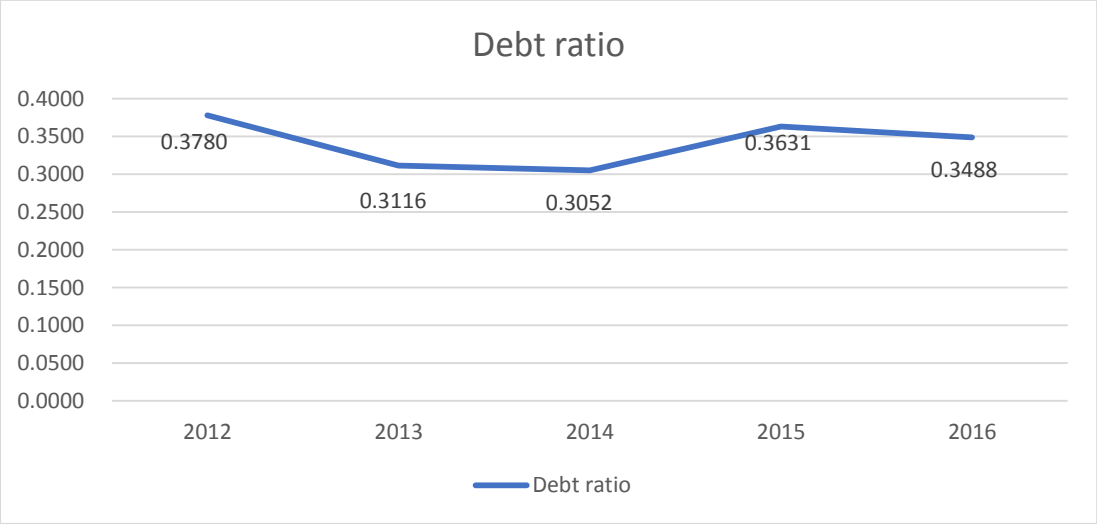
4.3.1 Debt ratio

Tab 4.8 shows the debt ratio of PRADA, Chart 4.8 shows the trend of debt ratio of PRADA.

Tab. 4.8 Debt ratio of PRADA from 2012 to 2016.

	2012	2013	2014	2015	2016
Debt ratio	0.3780	0.3116	0.3052	0.3631	0.3488

Chart 4.8 Trend of debt ratio from 2012 to 2016.



From Tab 4.8 we can see that there was a huge decline of debt ratio from 2012 to 2014. It was mainly because that the total amounts of assets increased significantly. And the absolute change of total debt was not so significantly from 2012 to 2014. So, the great increase of total assets led to the decline of debt ratio. However, from 2014 to 2015, there was a huge increase of debt ratio. Actually, both of total debt and total assets increased from 2014 to 2015, but from the results of chapter 3 we can see that the percentage change of total debt was far higher than the percentage change of total assets. The percentage change of total debt in 2014/2015 was 44.99%, the percentage change of total assets in 2014/2015 was only 21.88%.

As we have mentioned in chapter 2, generally the higher the debt ratio, the more source of company's assets is from debt, then the financial condition of the company is not so healthy. In general, the debt ratio accounts for 0.45 to 0.65 in normal company is relatively appropriate. However, we can see that debt ratio of PRADA from 2012 to 2016 was always lower than 0.45. It doesn't mean that the financial condition of PRADA was not healthy. It demonstrated that the source of PRADA's assets didn't depend on debt so much and it was also good for those

creditors of PRADA, they faced lower default risk.

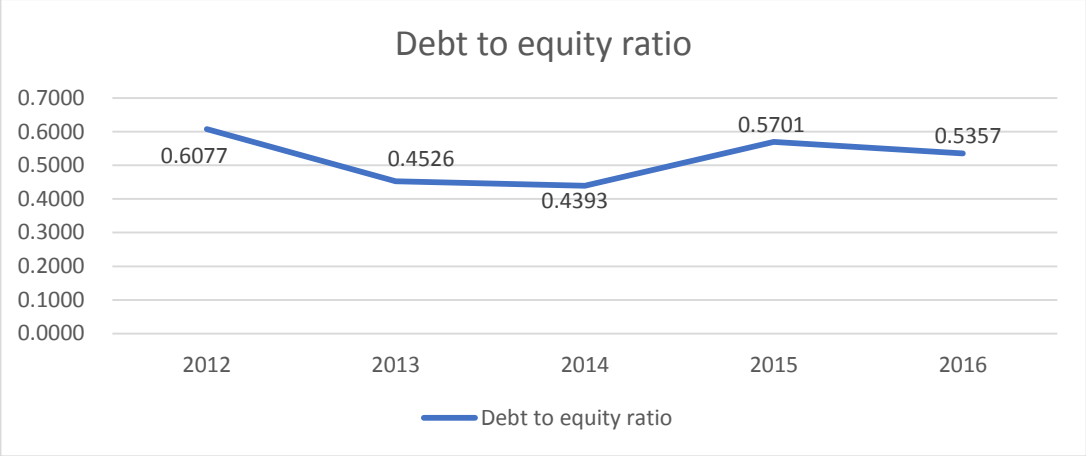
4.3.2 Debt to equity ratio

Tab 4.9 shows the debt to equity ratio of PRADA, Chart 4.9 shows the trend of debt to equity ratio of PRADA.

Tab. 4.9 Debt to equity ratio of PRADA from 2012 to 2016.

	2012	2013	2014	2015	2016
Debt to equity ratio	0.6077	0.4526	0.4393	0.5701	0.5357

Chart 4.9 Trend of debt to equity ratio from 2012 to 2016.



We can see from the Chart 4.9 that the general trend of debt to equity ratio from 2012 to 2016 was similar to the trend of debt ratio. There was also a huge decline of debt to equity ratio from 2012 to 2014 and a huge increase from 2014 to 2015. It was mainly because that the total amounts of equity increased significantly from 2012 to 2014. Both of the absolute and percentage change of equity were greater than total debt. Thus, it explained why debt to equity ratio declined from 2012 to 2014. And in 2014/2015, the percentage change of total debt was 44.99%, it was much higher than percentage change of equity which was only 11.72%. Thus, it explained why debt to equity ratio increased from 2014 to 2015.

As we have mentioned in chapter 2, the high debt to equity ratio means the high-risk and high-return financial structure, on the contrary, the low debt to equity ratio means low-risk, low-return financial structure. In general, it's better for company if the company's debt to equity ratio is lower than 1. From 2012 to 2016, we can see that debt to equity ratio of PRADA was always lower than 1. It indicated that the long-term financial status of PRADA is good and the creditor's rights are thus guaranteed. And PRADA is more willing to use its own share

capital rather than debt to maintain normal operation.

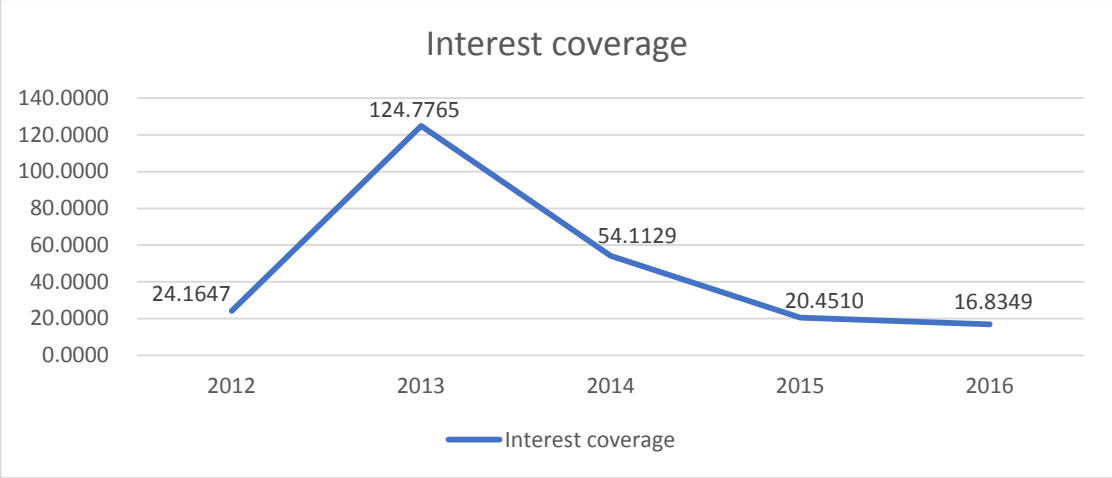
4.3.3 Interest coverage

Tab 4.10 shows the interest coverage of PRADA, Chart 4.10 shows the trend of interest coverage of PRADA.

Tab. 4.10 Interest coverage of PRADA from 2012 to 2016.

	2012	2013	2014	2015	2016
Interest coverage	24.1647	124.7765	54.1129	20.4510	16.8349

Chart 4.10 Trend of interest coverage from 2012 to 2016.



From Chart 4.10, we can see that from 2012 to 2013, there was really a huge increase in interest coverage of PRADA. It is because that there was a huge increase in EBIT and a huge decrease in interest from 2012 to 2013. We can see the results from chapter 3 that the percentage change of EBIT was 41.47% and the percentage change of interest was -72.60%.

As we have known from chapter 2. Under normal circumstances, if interest coverage is higher than 1, company has the ability to repay interest; if interest coverage is lower than 1, company did not have enough funds to repay interest, thus there is a serious solvency risk. It's not hard to find that PRADA has a strong ability to repay interest.

Solvency of a company is a very important factor for both shareholders, creditors and investors. And in summary of above solvency ratios, we can see that the solvency condition of PRADA is quite good during these years.

4.4 Activity ratios of PRADA Company

In this part, we will analyze how efficiency of PRADA to operate and generate revenues by using its assets and leverage. Activity ratios include average collection period (ACP), account receivable turnover (ART), inventory turnover (IT) and total assets turnover (TAT). First, we will analyze average collection period of PRADA.

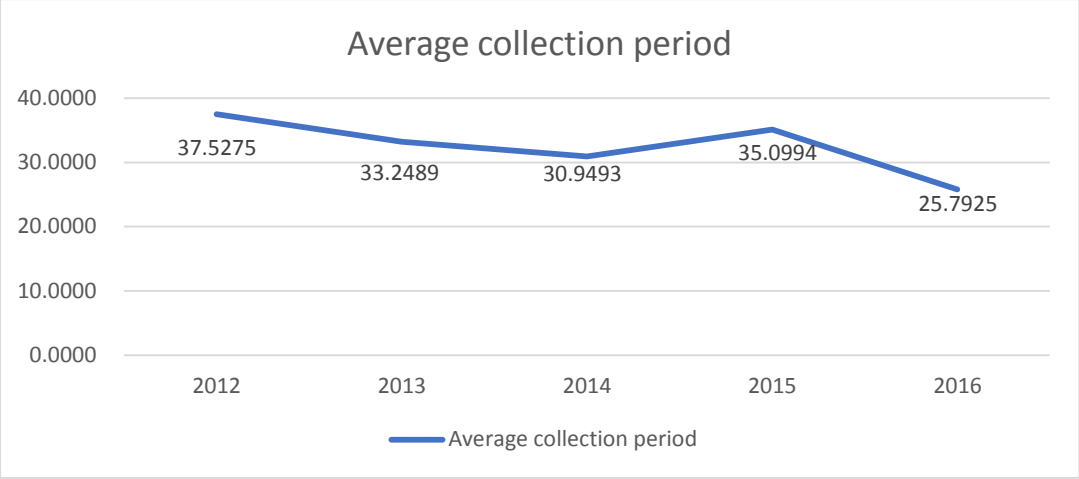
4.4.1 Average collection period (ACP)

Tab 4.11 shows the average collection period (ACP) of PRADA, Chart 4.11 shows the trend of average collection period of PRADA.

Tab. 4.11 Average collection period (ACP) of PRADA from 2012 to 2016.

	2012	2013	2014	2015	2016
Average collection period	37.5275	33.2489	30.9493	35.0994	25.7925

Chart 4.11 Trend of average collection period (ACP) from 2012 to 2016.



As we have mentioned in chapter 2, average collection period of a company means the number of days a company takes to collect receivables back. So, from the Chart 4.11 we can see that the general trend of average collection turnover was declining during these years. And the ratio also reached the lowest value in 2016 because that the accounts receivable also reached the lowest value. Actually, the lower the ratio is, the better for the company, because the company can receive these current assets sooner, which will also help the company to keep liquidity. So, the possibility of bad debts receivable of PRADA was also relatively small during these years.

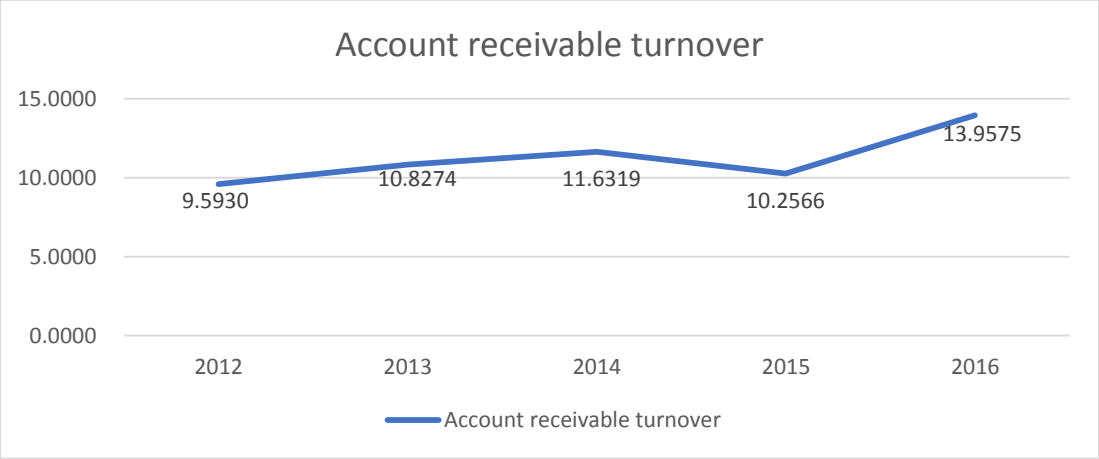
4.4.2 Account receivable turnover (ART)

Tab 4.12 shows the account receivable turnover (ART) of PRADA, Chart 4.12 shows the trend of account receivable turnover of PRADA.

Tab. 4.12 Account receivable turnover (ART) of PRADA from 2012 to 2016.

	2012	2013	2014	2015	2016
Account receivable turnover	9.5930	10.8274	11.6319	10.2566	13.9575

Chart 4.12 Trend of account receivable turnover (ART) from 2012 to 2016.



As we have mentioned in chapter 2, account receivable turnover means the number of times the accounts receivable are rolled over during a year. So, we can see the results from Chart 4.12 that this ratio corresponds to average collection period. The general trend of account receivable turnover of PRADA was increasing during these years. The lower the collection period is, the higher the turnover will be. Otherwise, the company's working capital will be sluggish in the accounts receivable, which will also affect the normal cash flow operation. So, the account receivable turnover of PRADA in 2016 reached the highest value.

Then, combining with average collection period and account receivable turnover, we can make a brief summary, the period that PRADA could collect receivables was about one month, and PRADA can also collect those receivables about 12 times a year. The results are good for PRADA, because PRADA can keep liquidity and reduce the possibility of bad debts.

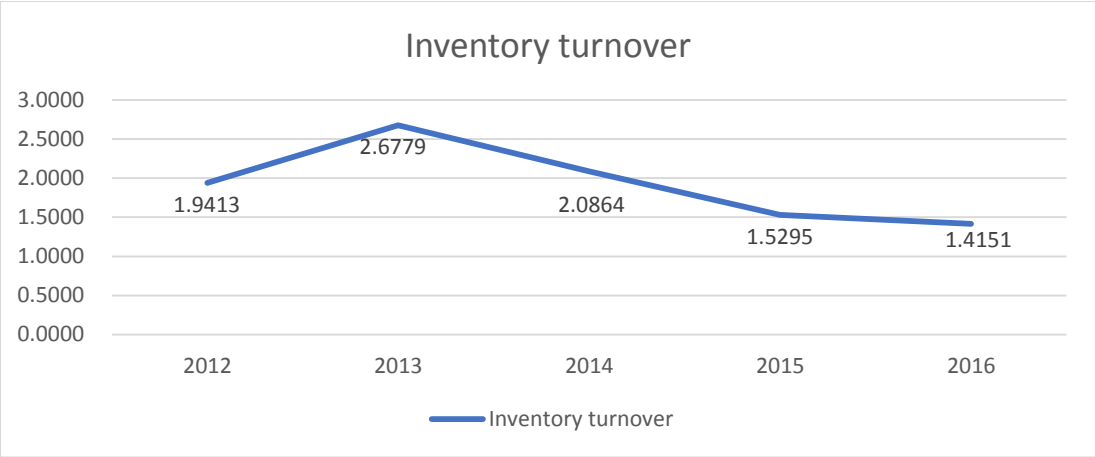
4.4.3 Inventory turnover (IT)

Tab 4.13 shows the inventory turnover (IT) of PRADA, Chart 4.13 shows the trend of inventory turnover of PRADA.

Tab. 4.13 Inventory turnover (IT) of PRADA from 2012 to 2016.

	2012	2013	2014	2015	2016
Inventory turnover	1.9413	2.6779	2.0864	1.5295	1.4151

Chart 4.13 Trend of inventory turnover (IT) from 2012 to 2016.



From Chart 4.13, we can see that inventory turnover of PRADA increased significantly from 2012 to 2013. It was because that the costs of goods sold increased and the inventory declined from 2012 to 2013. The reduction of inventory was a result that PRADA planned to shorten the time required for production and delivery activities and then reduce working capital needs. However, inventory turnover decreased from 2013 to 2016. It was because the reduction of costs of goods sold and increase of inventory. Specially, in 2016 inventory turnover reached the lowest value during these years. The main reason we have known in chapter 3 that PRADA wanted to improve competitiveness by launching more and more new and fashion products. It would cause the problem of inventory accumulation.

As we have mentioned in chapter 2, inventory turnover shows how many times a company's inventory is sold over a period of time such as a year. The higher the ratio is, the better for the company to deal with the problem of inventory backlog. So, we can see that inventory turnover of PRADA was not so ideal during these years.

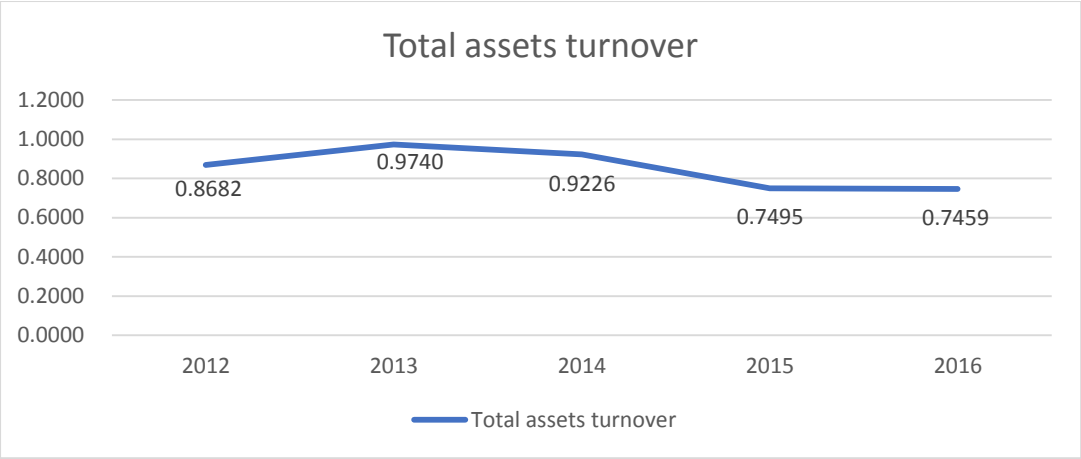
4.4.4 Total assets turnover (TAT)

Tab 4.14 shows the total assets turnover (TAT) of PRADA, Chart 4.14 shows the trend of total assets turnover of PRADA.

Tab. 4.14 Total assets turnover (TAT) of PRADA from 2012 to 2016.

	2012	2013	2014	2015	2016
Total assets turnover	0.8682	0.9740	0.9226	0.7495	0.7459

Chart 4.14 Trend of total assets turnover (TAT) from 2012 to 2016.



We can see from Chart 4.14 that total assets turnover of PRADA was always lower than 1 during these years. And the ratio was relatively stable, not changed too much during these years. As we have known from chapter 2, the higher the ratio is, the better for company. Because the ratio shows how greatly the company can generate revenues through using assets. But according to the assets turnover of PRADA, we can see that no matter in which year, each unit invested in assets could only generate revenues of lower than 1.

4.5 DuPont analysis of PRADA Company

In this part, we will analyze the profitability of PRADA by using DuPont analysis. And we will calculate ROE of PRADA according to formula (2.20), (2.21) and (2.22). As we have known in chapter 2, ROE can be decomposed into net profit margin, assets turnover, financial leverage. And net profit margin can be decomposed into tax burden, interest burden and EBIT margin.

Then, we will calculate them separately and the results are shown in the Tab 4.15.

Tab. 4.15 The value of each items in decomposition of ROE.

	2012	2013	2014	2015	2016
Net profit margin	0.1708	0.1921	0.1778	0.1293	0.0940
Tax burden	0.7239	0.7167	0.6911	0.6878	0.7013
Interest burden	0.9586	0.9931	0.9826	0.9518	0.9452
EBIT margin	0.2461	0.2699	0.2618	0.1975	0.1417
Assets turnover	0.8682	0.9740	0.9226	0.7495	0.7459
Financial leverage	1.6077	1.4526	1.4393	1.5701	1.5357
ROE	0.2384	0.2717	0.2361	0.1522	0.1076

Tab. 4.16 Absolute change of each items in decomposition of ROE.

	2012/2013	2013/2014	2014/2015	2015/2016
Net profit margin	0.0213	-0.0143	-0.0485	-0.0353
Tax burden	-0.0072	-0.0256	-0.0033	0.0135
Interest burden	0.0345	-0.0105	-0.0308	-0.0066
EBIT margin	0.0238	-0.0081	-0.0643	-0.0558
Assets turnover	0.1058	-0.0514	-0.1731	-0.0036
Financial leverage	-0.1551	-0.0133	0.1308	-0.0344
ROE	0.0333	-0.0356	-0.0839	-0.0446

From Tab 4.15 we can see that ROE of PRADA increased from 2012 to 2013, declined from 2013 to 2016. And reached the highest value in 2013, reached the lowest value in 2016. It was because that from 2012 to 2013, there was a huge increase in EAT, and the percentage change of EAT in 2012/2013 was also much higher than equity. And the reason why ROE of PRADA in 2016 reached the lowest value was because the magnitude of the decline was great. The percentage change of EAT in 2015/2016 was -27.41%. And we can also see the results in Tab 4.16, almost all the component ratios of ROE in 2012/2013 were positive which means that these ratios increased from 2012 to 2013. So, it was not hard to figure out that there would be an increase in ROE from 2012 to 2013. On the contrary, we can see that these component ratios were almost negative from 2013 to 2016, it explained why ROE declined from 2013 to 2016.

As we have mentioned in chapter 2, ROE reveals how much profit a company can generate from the money shareholders have invested. The higher is the ratio, the better for a company to generate profits. So, we can see that PRADA could generate about 2.7 euro profits

from 10 euro invested in equity in 2013 and only about 1.1 euro profits from 10 euro invested in equity in 2016.

Then, we will use influence quantification to analyze the influence of component ratios to ROE. In other words, we will decompose ROE, and analyze how the changes of each component ratios will affect the changes of ROE. As we have known from chapter 2 that there are three methods of influence quantification, but the results of these three methods are very similar. So, we will focus mainly on gradual changes method in this part. The gradual changes of ROE between 2012 and 2013 is shown in Tab 4.17, the results between 2013 and 2014 is shown in Tab 4.18, the results between 2014 and 2015 is shown in Tab 4.19, and the results between 2015 and 2016 is shown in Tab 4.20.

Tab 4.17 Gradual changes of ROE between 2012 and 2013.

	2012	2013	2012/2013(Δa)	ΔXa_i	Order
Net profit margin (a_1)	0.1708	0.1921	0.0213	0.0297	2
Assets turnover (a_2)	0.8682	0.9740	0.1058	0.0327	1
Financial leverage (a_3)	1.6077	1.4526	-0.1551	-0.0290	3
Sum				0.0334	

$$\Delta Xa_1 = 0.0213 \cdot 0.8682 \cdot 1.6077 = 0.0297$$

$$\Delta Xa_2 = 0.1921 \cdot 0.1058 \cdot 1.6077 = 0.0327$$

$$\Delta Xa_3 = 0.1921 \cdot 0.9740 \cdot -0.1551 = -0.0290$$

We can see that the results of the sum of gradual changes is equal to the absolute change of ROE (0.0333) between 2012 and 2013.

Tab 4.18 Gradual changes of ROE between 2013 and 2014.

	2013	2014	2013/2014(Δa)	ΔXa_i	Order
Net profit margin (a_1)	0.1921	0.1778	-0.0143	-0.0202	1
Assets turnover (a_2)	0.9740	0.9226	-0.0514	-0.0133	2
Financial leverage	1.4526	1.4393	-0.0133	-0.0022	3
Sum				-0.0357	

$$\Delta Xa_1 = -0.0143 \cdot 0.9740 \cdot 1.4526 = -0.0202$$

$$\Delta Xa_2 = 0.1778 \cdot -0.0514 \cdot 1.4526 = -0.0133$$

$$\Delta Xa_3 = 0.1778 \cdot 0.9226 \cdot -0.0133 = -0.0022$$

We can see that the results of the sum of gradual changes is equal to the absolute change of ROE (-0.0356) between 2013 and 2014.

Tab 4.19 Gradual changes of ROE between 2014 and 2015.

	2014	2015	2014/2015(Δa)	ΔXa_i	Order
Net profit margin (a_1)	0.1778	0.1293	-0.0485	-0.0644	1
Assets turnover (a_2)	0.9226	0.7495	-0.1731	-0.0322	2
Financial leverage (a_3)	1.4393	1.5701	0.1308	0.0127	3
Sum				-0.0839	

$$\Delta Xa_1 = -0.0485 \cdot 0.9226 \cdot 1.4393 = -0.0644$$

$$\Delta Xa_2 = 0.1293 \cdot -0.1731 \cdot 1.4393 = -0.0322$$

$$\Delta Xa_3 = 0.1293 \cdot 0.7495 \cdot 0.1308 = 0.0127$$

We can see that the results of the sum of gradual changes is equal to the absolute change of ROE (-0.0839) between 2014 and 2015.

Tab 4.20 Gradual changes of ROE between 2015 and 2016.

	2015	2016	2015/2016(Δa)	ΔXa_i	Order
Net profit margin (a_1)	0.1293	0.0940	-0.0353	-0.0415	1
Assets turnover (a_2)	0.7495	0.7459	-0.0036	-0.0005	3
Financial leverage	1.5701	1.5357	-0.0344	-0.0024	2
Sum				-0.0445	

$$\Delta Xa_1 = -0.0353 \cdot 0.7495 \cdot 1.5701 = -0.0644$$

$$\Delta Xa_2 = 0.0940 \cdot -0.0036 \cdot 1.5701 = -0.0322$$

$$\Delta Xa_3 = 0.0940 \cdot 0.7459 \cdot -0.0344 = 0.0127$$

We can see that the results of the sum of gradual changes is equal to the absolute change of ROE (-0.0446) between 2015 and 2016.

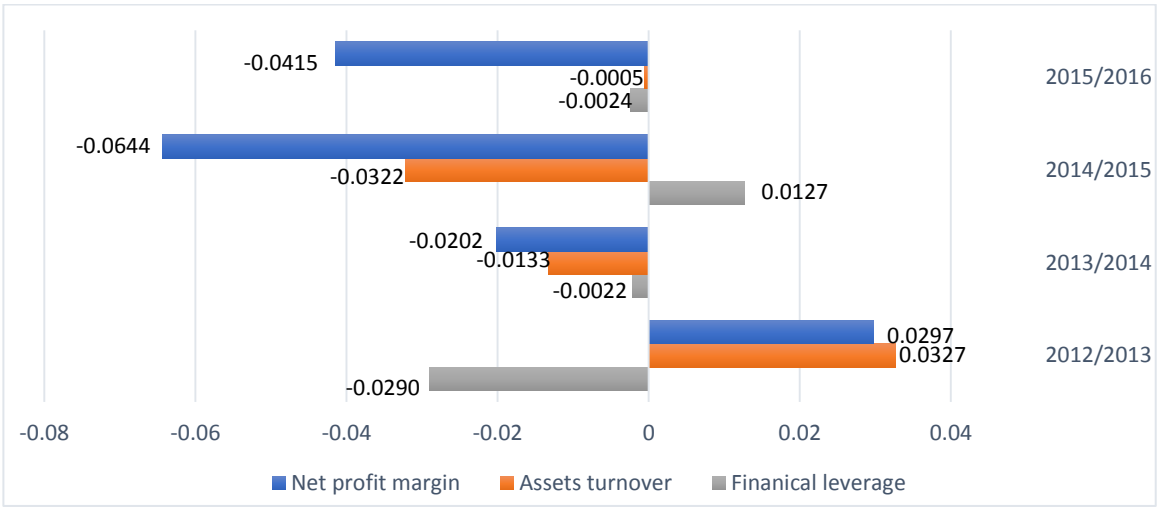
After analyzing all the gradual changes of each component ratio for each period from 2012 to 2015, we can see that the sum of the absolute change in the basic ratio is indeed equal to the absolute change of ROE. Then, we will put together all the results from 2012 to 2016 to

make further analysis and comparison. Both of Tab 4.21 and Chart 4.15 shows the gradual changes of ROE between 2012 to 2016.

Tab 4.21 Gradual changes of ROE between 2012 and 2016.

ΔXa_i	2012/2013	2013/2014	2014/2015	2015/2016
Net profit margin (a_1)	0.0297	-0.0202	-0.0644	-0.0415
Assets turnover (a_2)	0.0327	-0.0133	-0.0322	-0.0005
Financial leverage (a_3)	-0.0290	-0.0022	0.0127	-0.0024
Sum	0.0334	-0.0357	-0.0839	-0.0445

Chart 4.15 Gradual changes of ROE between 2012 and 2016.



From Tab 4.17, we can see that from 2012 to 2013, what influenced ROE most was assets turnover, which value was 0.0327. The second was net profit margin, which value was 0.0297. And the last was financial leverage, which was -0.0290. Both of assets turnover and net profit margin were positive in 2012/2013, it meant that with the increase of these two ratios, ROE would also increase. However, financial leverage was negative which meant ROE would decline with the increase of financial leverage. But the negative effect didn't cause too much trouble for ROE, because this ratio was the weakest one which affected ROE. And we can also find the proof in Tab 4.21, the absolute change of ROE in 2012/2013 was 0.0334, the result was positive.

From Tab 4.18, we can see that from 2013 to 2014, what influenced ROE most was net profit margin, which value was -0.0202. The second was assets turnover, which value was -0.0133. And the last was financial leverage, which was -0.0022. However, all of these ratios were negative. It meant that even if net profit margin influenced ROE most, the influence was

negative. If net profit margin increased one unit, ROE would decline 2.02%. It was not ideal for PRADA. Because of these negative effects, we can see from Tab 4.21 that the absolute change of ROE was -0.0357 in 2013/2014.

From Tab 4.19, we can see that from 2014 to 2015, what influenced ROE most was net profit margin, which value was -0.0644. The second was assets turnover, which value was -0.0322. And the last was financial leverage, which was 0.0127. Both of net profit margin and assets turnover were negative. Although financial leverage was positive, it still couldn't turn ROE into positive. Because it was the weakest ratio which affected ROE. We can see from Tab 4.21 that the absolute change of ROE was -0.0839 in 2014/2015, which was much worse than 2013/2014.

From Tab 4.20, we can see that from 2015 to 2016, what influenced ROE most was net profit margin, which value was -0.0415. The second was financial leverage, which value was -0.0024. And the last was assets turnover, which was -0.0005. All of these ratios were negative, so it was clear that the absolute change of ROE was also negative. We can see from Tab 4.21 that the absolute change of ROE was -0.0445 in 2015/2016. But we can see that the result was better than 2014/2015. It was because that both of net profit margin and absolute turnover increase.

Then, after putting together all of results, we can see from Chart 4.15 that except in 2012/2013, net profit margin was always the component ratio which influenced ROE most. However, the effect was always negative. And financial leverage was always the weakest ratio to influence ROE from 2012 to 2016, except 2015/2016. Although these ratios could be negative and positive during these years, and even there was no ratio could always be the strongest or weakest one to influence ROE during these years. We can see clearly from Chart 4.15 that in general, net profit was relatively the strongest ratio to affect ROE and financial leverage was the weakest from 2012 to 2016.

4.6 Summary

In this part, we will make a brief summary of the whole chapter 4 based on the results of profitability ratios, liquidity ratios, solvency ratios, activity ratios and DuPont analysis.

For the part of profitability ratio, we can see that from 2012 to 2016, return on assets fell from 21.37% to 10.57%, return on equity fell from 23.84% to 10.76%, net profit margin fell from 17.08% to 9.40%, operating profit margin fell from 24.61% to 14.17%. So, whichever profitability ratio we analyze, the general trend from 2012 to 2016 was downward. Especially from 2014 to 2016, there was always a huge decline in each profitability ratio. The main reason was because the pay was not proportional to the return. The revenues of PRADA have been decreasing because of the bad performance in Asia markets which are the main markets for PRADA. Since PRADA listed on Hong Kong Stock Exchange in 2011, PRADA has always depended on the sales from Asia markets. Revenues from Chinese consumers accounted for 35% in PRADA. However, in the past few years, influenced by economic and political instability, the sales from Asia markets continued slumping. Meanwhile, operating costs of PRADA has been constantly increasing during these years. Under the combined effect of revenues and costs, the profitability of PRADA has fallen.

For the part of liquidity ratio, we can see that from 2012 to 2016, current ratio increased from 155.95% to 238.49%, quick ratio increased from 103.65% to 151.02%, cash ratio increased from 50.68% to 87.43%. Combined with all the liquidity ratios, we can see that the general trends of all the liquidity ratios from 2012 to 2016 were upward. And the values of these ratios were also very high. PRADA has a strong ability to pay for its short-term debts. It indicates the financial condition of PRADA is healthy and financial risk is also quite low which is good for creditors of PRADA. We can see from chapter 3 that although current liabilities of PRADA have been increasing during these years, PRADA has also been increasing its current assets, and the growth rate of current assets was much higher than current liabilities. PRADA paid more attention to its current assets management and kept current assets on an ideal and suitable level during these years.

For the part of solvency ratio, we can see from the analysis of debt ratio and debt to equity ratio that these two ratios were quite stable from 2012 to 2016. From 2012 to 2016, there was only a slight decline of debt ratio which decreased from 0.3780 to 0.3488. And debt to equity ratio decreased slightly from 0.6077 to 0.5357. And the values of these ratios were relatively low, which meant that PRADA's financial condition was healthy and had a low-risk, low-return

financial structure. Similar to liquidity ratio, solvency ratio can also reflect a company's financial condition and the level of financial risk. So, from both liquidity ratio and solvency ratio, we can see that PRADA indeed did a good job in the field of controlling financial risk.

For the part of activity ratio, we can see that the ability of PRADA to collect receivable back was good during these years. On the average, PRADA can collect receivables back within 30 days, and can also collect receivables about 12 times a year. According to these results we can believe that PRADA managed its operation well and the efficiency of using its assets was fine during these years.

For the part of DuPont analysis, we can see that from 2012 to 2016, net profit margin was the most influential indicator for return on equity. Nevertheless, the effect was negative, which was unfavorable for PRADA. We can see that between 2013 and 2014, ΔXa_i of net profit margin was -0.0202, and the gradual change of ROE was -0.0357. Between 2014 and 2015, ΔXa_i of net profit margin was -0.0644, and the gradual change of ROE was -0.0839. Between 2015 and 2016, ΔXa_i of net profit margin was -0.0415, and the gradual change of ROE was -0.0445. It also indicated that PRADA should pay more attention to the field of net profit margin. As we have analyzed before, net profit margin of PRADA decreased from 2012 to 2016 in general. It was the main reason that lead to the negative effect of net profit margin for return on equity. So, if PRADA wants to improve its return on equity, it needs to improve net profit margin, which also means that PRADA should make strategies to increase its revenues, try its best to restore sales from Asia markets.

5 Conclusion

Financial analysis is based on some basic data from financial statement, then calculate some financial indicators which are mainly related to profitability, liquidity, and solvency according to some formulas. Whether you are a manager or an investor, at least you need to figure out what you are willing to analyze. After that, what matters most is that we need to conduct real analysis of these results, the way of analyzing refers to make comparison which is very important but also very fundamental. The comparison contains many aspects: comparing indicators with last year's results, comparing indicators with competitors, even the general industry. Then, after comparison, whatever conclusion is drawn, managers and investors can use these final results to adjust their behaviors and achieve idealized state.

The goal of this thesis is to analyze financial condition of PRADA from 2012 to 2016. Ultimately, we will forecast the future development of PRADA and put forward some reasonable proposals for its operation.

After all of the calculations and analysis, we acquired lots of information about PRADA's financial situation, the efficiency of its normal operation and management and the how well they used its capital, etc. We had a general recognition of PRADA. Then, we drew a conclusion of each chapter and finally made recommendations for PRADA's future development.

In chapter 2, at first, we introduced three kinds of financial statements thoroughly. And our introduction included the specific definition and function of each financial statement, and concrete explanation of each items in each financial statement. We also listed examples of each financial statement. Then, we described two kinds of common-size analysis. Our description contained the definition, function of these two methods and the differences between these two methods. In the end, we described four types of vital financial ratios and DuPont analysis. For the part of financial ratios, we explained the meaning and features of each ratio and the formula of each ratio. For the part of DuPont analysis, we also introduced lots of formulas of it and three methods about how to use it.

In chapter 3, we introduced lots of basic information of PRADA. And we also knew the history, business model and competition of PRADA. From these basic information, we could make initial judgement of PRADA that it performed very well during these years, but it still faced great pressure of fierce competition. Then, we used two kinds of common-size analysis to analysis financial situation of PRADA. After analyzing some items of financial statements,

we drew some conclusions about the changes and general trend of each item, and we also explained the reasons of these changes.

In chapter 4, we mainly focused on conducting financial ratio analysis of PRADA by calculating these ratios according to the formulas we mentioned in chapter 2. For the part of profitability ratios, after our analysis we could see the general trend of profitability ratios from 2012 to 2016 was declining. And we could also see that whichever ratio we selected to analyze the ability of PRADA to generate profit, PRADA always performed best in 2013 and performed worst in 2016 during these years. It was a bad sign for PRADA. Because the lower profitability ratios indicate less profit the company will generate. For the part of liquidity ratios, after our analysis we could see that the general trend of liquidity ratios from 2012 to 2016 was rising. It was good for PRADA. Because as we mentioned in chapter 2 that the higher liquidity ratios indicate the higher safety margin the company possess to pay for liabilities. For the part of solvency ratios, after our analysis we could see that the general trend of solvency ratios from 2012 to 2016 was slightly decreasing. But generally, it was relatively stable. This was also a good signal for PRADA. Because it implied that there was a little financial risk of PRADA. For the part of activity ratios, we could see that the general situation of PRADA's efficiency of using assets was fine. But activity ratios will be useful when compared with another competitor or the whole industry. So, in order to draw precise conclusion, still need to analyze the whole industry. In the end, we used gradual changes method to conduct DuPont analysis of PRADA. And in general, we could see that what influence return on equity ratio most was net profit margin from 2012 to 2016, but the effect was negative. It was not so favorable for PRADA. Because for a company, the higher is the return on equity, the better for its operation.

In summary, conducting financial analysis is indeed necessary and beneficial for any company and investors and creditors of this company. After our whole analysis for PRADA from 2012 to 2016, we could clearly see that PRADA performed very well in liquidity and solvency areas. There was little financial risk in PRADA from 2012 to 2016. However, PRADA still faces many threatens from its competitors among the whole luxury goods industry. We could see from the results of the profitability ratios analysis. The ability of generating profits from its assets, equity was declining from 2012 to 2016. It was not ideal for PRADA. It is not hard to figure out the reason. There is a fierce competition among the whole luxury goods industry. So, in order to remain competitive, PRADA still needs to focus on the designing and be more fashionable and creative. But it doesn't mean that PRADA can increase expenses unrestrictedly. On the contrary, what PRADA need to strengthen the ability to generate profit

and increase profitability is to restrict the expenses, decrease unnecessary expenses and increase revenues. And PRADA shouldn't over-reliance on Asia markets any more. It should make some marketing research and expand its markets to other regions by advertising. If PRADA could improve these inadequacies, we think there will be a great progress and huge development of PRADA in the future.

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List of Abbreviations

A - Asset

ACP - Average collection period

ART - Account receivable turnover

COGS - Cost of goods sold

EAT - Earning after taxes

EBIT - Earning before interest and taxes

EBT - Earning before taxes

GPM - Gross profit margin

IT - Inventory turnover

NPM - Net profit margin

OPM - Operating profit margin

REV - Revenue

ROA - Return on assets

ROE - Return on equity

TAT - Total assets turnover

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Yiwen Xu .....

Yiwen Xu

List of Annexes

Annex 1: Balance sheet of PRADA. (1000 euros)

	2012	2013	2014	2015	2016
Assets					
Long-term assets					
Property, plant and equipment	713 870	857 299	1 230 192	1 474 218	1 517 779
Intangible assets	863 526	878 750	901 289	943 304	932 238
Associated undertakings	15 631	23 024	21 186	30 529	17 354
Deferred tax assets	175 736	176 057	201 245	280 983	280 572
Other long-term assets	57 302	61 682	69 867	91 353	113 954
Derivative financial instruments	-	1 018	1 430	1 106	721
Total long-term assets	1 826 065	1 997 830	2 426 696	2 838 922	2 868 117
Current assets					
Cash and cash equivalents	362 284	571 746	568 414	708 966	680 601
Trade receivables	266 404	304 525	308 405	346 284	254 183
Inventories	374 782	343 802	449 903	654 545	692 672
Derivative financial instruments	894	43 060	13 984	6 287	11 682
Receivables from other parties	12 864	19 493	5 993	3 240	19 629
Other current assets	100 275	104 823	114 897	180 633	229 671
Total current assets	1 117 503	1 387 449	1 461 596	1 899 955	1 888 438
Total assets	2 943 568	3 385 279	3 888 292	4 738 877	4 756 555
Liabilities and Shareholders' equity					
Long-term liabilities					
Long-term financial payables	178 442	78 830	207 950	255 203	520 475
Obligations under finance leases	1 100	518	19	-	-
Post-employment benefits	35 898	45 538	63 279	85 754	69 405
Provision for risk and charges	56 921	46 914	52 660	63 695	69 233
Deferred tax liabilities	47 665	55 636	42 671	41 634	36 882
Other long-term liabilities	75 656	84 905	98 982	128 752	161 317
Derivative financial instruments	335	384	1 469	17 283	10 047
Total long-term liabilities	396 017	312 725	480 277	605 705	867 359
Current liabilities					

Short-term loans	165 485	175 570	61 909	263 335	270 112
Payables to other parties	4 361	5 599	4 894	3 083	5 244
Trade payables	283 538	330 613	348 534	437 420	281 699
Current tax liabilities	117 770	97 148	132 145	133 914	80 744
Derivative financial instruments	15 200	912	3 803	56 772	11 095
Obligations under finance leases	1 453	575	524	21	654
Other current liabilities	128 777	131 645	154 666	220 480	142 271
Total current liabilities	716 584	742 062	706 475	1 115 025	791 819
Total liabilities	1 112 601	1 054 787	1 186 752	1 720 730	1 659 178
Shareholders' equity					
Share capital	255 882	255 882	255 882	255 882	255 882
Other reserves	1 152 171	1 480 747	1 853 325	2 163 129	2 355 023
Translation reserve	-17 239	-42 288	-49 438	130 996	138 547
Net profit for the year	431 929	625 681	627 785	450 730	330 888
Total shareholders' equity	1 830 967	2 330 492	2 701 540	3 018 147	3 097 377
Total liabilities and shareholders' equity	2 943 568	3 385 279	3 888 292	4 738 877	4 756 555

Annex 2: Income statement of PRADA. (1000 euros)

	2012	2013	2014	2015	2016
Revenues	2 555 606	3 297 219	3 587 347	3 551 696	3 547 771
Cost of goods sold	-727 581	-920 678	-938 698	-1 001 117	-980 206
Gross profit	1 828 025	2 376 541	2 648 649	2 550 579	2 567 565
Operating expenses	-1 199 090	-1 486 760	-1 709 412	-1 849 028	-2 064 672
EBIT	628 935	889 781	939 237	701 551	502 893
Interest	-26 027	-7 131	-17 357	-34 304	-29 872
Dividend received	0	966	1 016	455	2 311
EBT	602 908	883 616	922 896	667 702	475 332
Taxation	-166 483	-250 339	-285 091	-208 484	-141 994
EAT	436 425	633 277	637 805	459 218	333 338